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APPLICATION IN
THE UNITED STATES
PATENT AND TRADEMARK OFFICE

FOR
CRYSTALS OF THE TYROSINE KINASE DOMAIN
OF NON-INSULIN RECEPTOR TYROSINE KINASES

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CRYSTALS OF THE TYROSINE KINASE DOMAIN
OF NON-INSULIN RECEPTOR TYROSINE KINASES

1. INTRODUCTION

5 The present invention concerns crystalline forms of polypeptides corresponding to the catalytic domain of receptor tyrosine kinases of the non-insulin receptor type. Such tyrosine kinases include receptors of a class that are not covalently cross-linked but are understood to undergo
10 ligand-induced dimerization (such as the FGF-receptor), as well as cytoplasmic tyrosine kinases. The invention also concerns methods for obtaining such crystals and to the high-resolution X-ray diffraction structures and atomic structure coordinates obtained therefrom. The crystals of the
15 invention, and the atomic structure coordinates obtained therefrom, are useful for solving the crystal and solution structures of the tyrosine kinase domains and for identifying compounds that bind to domains of receptor and non-receptor tyrosine kinases.

20

2. BACKGROUND OF THE INVENTION

 Growth factors play important roles in the control of cell growth, differentiation, metabolism and oncogenesis. The signals generated by a growth factor are transduced
25 across the cellular membrane by transmembrane receptors specific for the growth factor. The diverse biological effects of growth factors are mediated by a large family of cell surface transmembrane receptors with intrinsic protein tyrosine kinase (PTK) activity. The extracellular portion of
30 receptor PTKs contain the binding site for its particular growth factor/ligand, whereas the tyrosine kinase activity resides in the cytoplasmic portion. Binding of a growth factor to the extracellular domain of this receptor results in autophosphorylation of specific tyrosine residues in the
35 cytoplasmic domain. These phosphotyrosines either stimulate PTK activity or serve as binding sites for downstream

signalling proteins containing Src-homology 2 (SH2) or phosphotyrosine binding (PTB) domains.

Eighteen classes or subfamilies of human receptor PTKs have been identified to date, including the insulin receptor (IR), EGF-receptor, PDGF receptor and FGF-receptor. Ligand-induced dimerization of receptors such as the EGF, PDGF and FGF receptors is thought to be essential for activation. Growth factors, such as PDGF are dimeric molecules which, by themselves, are able to induce PDGF-receptor dimerization. However, FGFs are monomeric and are unable, by themselves, to induce receptor dimerization. Dimerization of FGF receptors is thought to be mediated by FGF in concert with heparin sulfate proteoglycans (soluble or cell surface bound).

In contrast to the EGF, PDGF and FGF receptors, which are monomeric and dimerize upon ligand binding, the insulin receptor exists as a "dimer." In fact, the insulin receptor is a disulphide-linked $\alpha_2\beta_2$ heterotetramer. Binding of insulin to the extracellular α -chains is thought to cause a change within the quaternary structure of the receptor that results in autophosphorylation of specific tyrosines in the cytoplasmic portion of the β chains.

In an effort to elucidate the mechanisms underlying kinase activation, the crystal structure of such proteins is often sought to be determined. The crystal structures of several protein serine/threonine kinases have been reported: cyclic-AMP-dependent protein kinase (CAPK; Knighton et al., 1994); cyclin-dependent kinase 2 (CDK2; DeBondt et al., 1993); mitogen-activated protein kinase (MAPK; Zhang et al., 1994); and twitchin kinase (Hu et al., 1994). However, the crystalline structure of only one receptor tyrosine kinase has been determined -- the unphosphorylated apo form of the tyrosine kinase domain of the insulin receptor (Hubbard et al., 1994).

Despite these reports, the ability to obtain crystalline forms of the tyrosine kinase domains of non-insulin receptor tyrosine kinases; i.e., cytoplasmic tyrosine kinases and/or receptor tyrosine kinases that undergo ligand-mediated

dimerization, has not been realized. A particularly illuminating example is the EGF receptor; to the Applicant's knowledge, researchers armed with the knowledge of how to obtain crystals of the tyrosine kinase domains of both the insulin receptor and serine/threonine kinases have attempted to obtain crystals of the tyrosine kinase domain of EGF receptor without success.

3. SUMMARY OF THE INVENTION

10 The invention relates to crystalline forms of polypeptides corresponding to the catalytic domains of receptor tyrosine kinases of the non-insulin receptor type. Such tyrosine kinases include receptors that are not covalently cross-linked, but are believed to undergo ligand-
15 induced dimerization, as well as cytoplasmic tyrosine kinases. The polypeptides of the invention include, but are not limited to, crystallized polypeptides corresponding to the native or mutated catalytic domain of tyrosine kinases (i.e., the non-insulin receptor-type described above),
20 derivative crystals (i.e., heavy atom derivatives), and co-crystals of the native or mutated catalytic domain in association with one or more compounds, including but not limited to cofactors, substrates, substrate analogs, inhibitors, allosteric effectors, etc., and preferably
25 compounds that bind the catalytic site.

Preferably, the crystalline catalytic domains of the invention are of sufficient quality to provide for a determination of the three-dimensional X-ray diffraction structure of the crystalline polypeptide to a resolution of
30 about 1.5 Å to about 2.5 Å.

The invention is based, in part, on the Applicants' discovery and elucidation of the sequence requirements for the successful crystallization of polypeptides corresponding to catalytic domains of receptor tyrosine kinases that are
35 not covalently cross-linked and are believed to undergo ligand-induced dimerization -- a goal which heretofore remained elusive. In this regard, the Applicants have

determined that at least about 20 amino acid residues (+/- 5 amino acid residues) upstream of the first glycine in the conserved glycine-rich region of the catalytic domain, and at least about 17 amino acid residues (+/- 5 amino acid residues) downstream of the conserved arginine located at the C-terminal boundary of the catalytic domain are required to engineer a polypeptide suitable for crystallization.

In those cases where the resulting polypeptide contains cysteine residues that interfere with crystallization, such cysteine residues can be substituted with an appropriate amino acid that does not readily form covalent bonds with other amino acid residues under crystallization conditions, e.g., such substitutions include, but are not limited to Ala, Ser, or Gly. Any cysteines located in a non-helical or non- β -strand segment based on secondary structural assignments are candidates for replacement. Cysteines located in domains corresponding to the glycine-rich loop, the kinase insert, the juxtamembrane region or the activation loop are prime candidates for replacement. However, substitutions of cysteine residues that are conserved among the kinases should be avoided (e.g., substitutions of the highly conserved cysteine residues located at the C-terminus, positions 725 and 736 in FIG. 6A, should be avoided).

The invention is demonstrated by way of example, for the fibroblast growth factor (FGF) receptor-1 (FGF-R1). The examples demonstrate that the crystal structure of the tyrosine kinase domain of the FGF-R1 has been determined to 2.0 Å resolution; the crystal structure of the FGF-R1 catalytic domain in complex with an ATP analog is described to 2.3 Å resolution.

The crystalline catalytic domains are useful for elucidating the mechanism by which the receptor tyrosine kinases are activated by ligand-induced dimerization, and for the identification of compounds that bind to the catalytic domain.

3.1 Definitions

As used herein, the following terms shall have the following meanings:

5 "Native Tyrosine Kinase Domain or Native Catalytic Domain:" As used herein, "native tyrosine kinase domain" or "native catalytic domain" refers to that portion or domain of a naturally occurring cytoplasmic tyrosine kinase or non-insulin receptor tyrosine kinase which possesses protein
10 tyrosine kinase ("PTK") activity as described in Mohammadi et al., 1991 and 1996.

"Human FLGK:" As used herein, "human FLGK" refers to the tyrosine kinase domain of human fibroblast growth factor
15 receptor 1 ("FGFR1") having the amino acid sequence of SEQ ID NO:1. Generally, human FLGK comprises a 310 amino acid residue fragment (residues 456 to 765) of human FGFR1.

"FLGK:" As used herein, "FLGK" refers to a mutant of
20 human FLGK which is characterized by the amino acid sequence of SEQ ID NO:2. As compared to human FLGK, FLGK contains the following amino acid substitutions: Cys-488 → Ala, Cys-584 → Ser, Leu-457 → Val, and has an additional five amino acid residues at the N-terminus (Ser-Ala-Ala-Gly-Thr).

25 "Mutant:" As used herein, "mutant" refers to a polypeptide which is obtained by replacing at least one amino acid residue in a native tyrosine kinase domain with a different amino acid residue and/or by adding and/or deleting
30 amino acid residues within the native polypeptide or at the N- and/or C-terminus of a polypeptide corresponding to a native tyrosine kinase domain and which has substantially the same three-dimensional structure as the native tyrosine kinase domain from which it is derived. By having
35 substantially the same three-dimensional structure is meant having a set of atomic structure coordinates that have a root mean square deviation (r.m.s.d.) of less than or equal to

about 2 Å when superimposed with the atomic structure coordinates of the native tyrosine kinase domain from which the mutant is derived when at least about 50% to 100% of the Cα atoms of the native tyrosine kinase are included in the
5 superposition.

A mutant may have, but need not have, PTK activity.

"Crystal:" As used herein, "crystal" refers to a polypeptide in crystalline form. The term "crystal" includes
10 native crystals, derivative crystals and co-crystals, as described herein.

"Native Crystal:" As used herein, "native crystal" refers to a crystal wherein the polypeptide is substantially
15 pure.

"Derivative Crystal:" As used herein, "derivative crystal" refers to a crystal wherein the polypeptide is in covalent association with one or more heavy-metal atoms.
20

"Co-Crystal:" As used herein, "co-crystal" refers to a crystal wherein the polypeptide is in association with one or more compounds. Such compounds include, by way of example and not limitation, cofactors, substrates, substrate
25 analogues, inhibitors, allosteric effectors, etc. Preferred compounds include AMP-PCP and AMP-PNP.

"Co-Complex:" As used herein, "co-complex" refers to a polypeptide in association with one or more compounds as
30 enumerated above.

"Association:" As used herein, "association" refers to a condition of proximity between a chemical entity or compound, or portions or fragments thereof, and tyrosine
35 kinase domain protein, or portions or fragments thereof. The association may be non-covalent, i.e., where the juxtaposition is energetically favored by, e.g., hydrogen-

bonding, van der Waals, electrostatic or hydrophobic interactions, or it may be covalent.

"Active Site:" As used herein, "active site" refers to
5 that site in tyrosine kinase domains where substrate peptide
binding, ATP binding and cleavage occur. For human FLGK and
FLGK, the active site comprises the catalytic loop, the
activation loop and the nucleotide binding loop and is
characterized by at least amino acid residues Lys-514, Glu-
10 531, Asp-623, Asn-628, the glycine-rich loop (amino acid
residues 485-490), Asp-641 and Arg-627 (FIG. 3).

"Catalytic Loop:" As used herein, "catalytic loop"
refers to a loop in tyrosine kinase domains between αE and $\beta 7$
15 containing conserved amino acid residues that are believed to
be important in the phosphotransfer reaction or enzymatic
process. For human FLGK and FLGK the catalytic loop contains
aspartic acid residue Asp-623, which acts as a catalytic
base, and is characterized by at least amino acid residues
20 621 to 628 (FIG. 3).

"Activation Loop:" As used herein, "activation loop"
refers to a loop in tyrosine kinase domains between $\beta 8$ and
 αEF that is believed to act as a regulatory loop. For human
25 FLGK and FLGK, the activation loop contains two
autophosphorylation sites and is characterized by at least
amino acid residues 640 to 663 (FIG. 3).

"Nucleotide Binding Loop or Glycine-Rich Loop:" As used
30 herein, "nucleotide-binding loop" or "glycine-rich loop"
refers to a loop in tyrosine kinase domains between $\beta 1$ and $\beta 2$
which contains the protein kinase-conserved glycine-rich
GXGXXG consensus sequence (where X is any amino acid). For
human FLGK and FLGK the nucleotide binding loop is
35 characterized by at least amino acid residues 485 to 490
(FIG. 3).

"Autophosphorylation Site:" As used herein, "autophosphorylation site" refers to those tyrosine residues in tyrosine kinase domains that are phosphorylated by a tyrosine kinase domain. Human FLGK and FLGK have six (6)
5 autophosphorylation sites: two in the activation loop (Tyr-653 and Tyr-654), one in the juxtamembrane region (Tyr-463), two in the kinase insert (Tyr-583 and Tyr-585) and one in the C-terminal lobe (Tyr-730) (Mohammadi et al., 1996).

10 "Juxtamembrane Region:" As used herein, "juxtamembrane region" refers to that portion of receptor tyrosine kinases located between the transmembrane helix and the tyrosine kinase domain. For human FGFR1 the juxtamembrane region is characterized by at least amino acid residues 398 to 470
15 (FIG. 6).

"Kinase Insert:" As used herein, "kinase insert" refers a stretch of up to about one hundred amino acid residues which divides the tyrosine kinase domain of certain tyrosine
20 kinases in two. For human FLGK and FLGK, the kinase insert is located between helices α D and α E (FIGS. 1 and 3), contains autophosphorylation sites Tyr-583 and Tyr-585, and is characterized by at least amino acid residues 575 to 596 (FIG. 3).

25 "Unit Cell:" As used herein, "unit cell" refers to the smallest and simplest volume element (*i.e.*, parallelepiped-shaped block) of a crystal that is completely representative of the unit of pattern of the crystal. The dimensions of the
30 unit cell are defined by six numbers: dimensions a, b and c and angles α , β and γ (Blundel et al., 1976). A crystal is an efficiently packed array of many unit cells.

"Monoclinic Unit Cell:" As used herein, "monoclinic
35 unit cell" refers to a unit cell wherein $a \neq b \neq c$; $\alpha = \gamma = 90^\circ$; and $\beta > 90^\circ$.

"Crystal Lattice:" As used herein, "crystal lattice" refers to the array of points defined by the vertices of packed unit cells.

5 "Space Group:" As used herein, "space group" refers to the symmetry of a unit cell. In a space group designation (e.g., C2) the capital letter indicates the lattice type and the other symbols represent symmetry operations that can be carried out on the unit cell without changing its appearance.

10 "Asymmetric Unit:" As used herein, "asymmetric unit" refers to the largest aggregate of molecules in the unit cell that possesses no symmetry elements, but that can be juxtaposed on other identical entities by symmetry
15 operations.

"Crystallographically-Related Dimer:" As used herein, "crystallographically-related dimer" refers to a dimer of two molecules wherein the symmetry axes or planes that relate the
20 two molecules comprising the dimer coincide with the symmetry axes or planes of the crystal lattice.

"Non-Crystallographically-Related Dimer:" As used herein, "non-crystallographically-related dimer" refers to a
25 dimer of two molecules wherein the symmetry axes or planes that relate the two molecules comprising the dimer do not coincide with the symmetry axes or planes of the crystal lattice.

30 "Isomorphous Replacement:" As used herein, "isomorphous replacement" refers to the method of using heavy-atom derivative crystals to obtain the phase information necessary to elucidate the three-dimensional structure of a native crystal (Blundel et al., 1976). The phrase "heavy-atom
35 derivatization" is synonymous with "isomorphous replacement."

"Molecular Replacement:" As used herein, "molecular replacement" refers to the method of calculating initial phases for a new crystal whose structure coordinates are unknown by orienting and positioning a molecule whose structure coordinates are known within the unit cell of the new crystal so as to best account for the observed diffraction pattern of the new crystal. Phases are then calculated from this model and combined with observed amplitudes to provide an approximate Fourier synthesis of the structure of the molecules comprising the new crystal. This, in turn, is subject to any of several methods of refinement to provide a final, accurate set of structure coordinates for the new crystal (Lattman, 1985; Rossman, 1972).

3.2 Abbreviations

The amino acid notations used herein for the twenty genetically encoded L-amino acids are conventional and are as follows:

	Amino Acid	One-Letter Symbol	Three-Letter Symbol
20	Alanine	A	Ala
	Arginine	R	Arg
	Asparagine	N	Asn
	Aspartic acid	D	Asp
25	Cysteine	C	Cys
	Glutamine	Q	Gln
	Glutamic acid	E	Glu
	Glycine	G	Gly
	Histidine	H	His
30	Isoleucine	I	Ile
	Leucine	L	Leu
	Lysine	K	Lys
	Methionine	M	Met
35	Phenylalanine	F	Phe
	Proline	P	Pro
	Serine	S	Ser

	Amino Acid	One-Letter Symbol	Three-Letter Symbol
	Threonine	T	Thr
	Tryptophan	W	Trp
5	Tyrosine	Y	Tyr
	Valine	V	Val

"ATP:" As used herein, "ATP" refers to adenosine triphosphate.

10

"AMP-PCP:" As used herein, "AMP-PCP" refers to adenylyl diphosphonate, a non-hydrolyzable analogue of ATP.

"AMP-PNP:" As used herein, "AMP-PNP" refers to adenylyl
15 imidodiphosphate, a non-hydrolyzable analogue of ATP.

"C_α:" As used herein, "C_α" refers to the alpha carbon of an amino acid residue.

20

4. BRIEF DESCRIPTION OF THE FIGURES

FIG. 1 provides a ribbon diagram of the structure of FLGK showing the side chains of tyrosines Tyr-653 and Tyr-654 and the α helical (α C, α D, α E, α EF, α F- α I), β strand (β 1- β 5, β 7, β 8), nucleotide-binding loop, catalytic loop, activation
25 loop and kinase insert regions of the molecule. The termini are denoted by N and C. The loop between β 2 and β 3 is disordered, indicated by a break in the chain in this region.

FIG. 2 provides a stereo view of a C_α trace of FLGK shown in the same orientation as FIG. 1, with every tenth amino
30 acid residue marked with a filled circle and every twentieth amino acid residue labeled with a residue number.

FIG. 3 provides a structure-based sequence alignment of human fibroblast growth factor receptor 1 (FGFR1), human fibroblast growth factor receptor 2 (FGFR2), human fibroblast
35 growth factor receptor 3 (FGFR3), human fibroblast growth factor receptor 4 (FGFR4), a *D. melanogaster* homolog

(DFGFR1), a *C. elegans* homolog (EGL-15) and insulin receptor tyrosine kinase (IRK).

FIGS. 4A and 4B provide ribbon diagrams of the N-terminal lobes (4A) and C-terminal lobes (4B) of FLGK and 5 IRK in which the C_α atoms of the β sheets (4A) or α-helices (4B) of the two proteins have been superimposed.

FIG. 5 illustrates the side-chain positions of the tyrosine autophosphorylation sites of FLGK on the backbone representation of FLGK.

10 FIGS. 6A and 6B are amino acid sequence alignments of the catalytic domains of PTKs, including receptor and non-receptor type PTKs. FIG. 6A depicts one representative member from each of the eighteen subfamilies of receptor tyrosine kinases. FIG. 6B depicts one representative member 15 from each of the subfamilies of cytoplasmic tyrosine kinases. In FIGS. 6A and 6B highly conserved residues are boxed. The position of the glycine-rich domain, kinase insert, catalytic loop, and activation loop are indicated. The numbering is for human FGF-receptor.

20

4.1. BRIEF DESCRIPTION OF THE TABLES

Table 1 summarizes the X-ray crystallography data sets of FLGK derivative crystals that were used to determine the structures of crystalline FLGK and crystalline FLGK:AMP-PCP 25 co-complex of the invention;

Table 2 summarizes the X-ray crystallography refinement parameters of the structures of crystalline FLGK and crystalline FLGK:AMP-PCP co-complex of the invention;

Table 3 provides the atomic structure coordinates of 30 native FLGK crystals of the invention as determined by X-ray crystallography; and

Table 4 provides the atomic structure coordinates of FLGK:AMP-PCP co-crystals of the invention as determined by X-ray crystallography.

35

5. DETAILED DESCRIPTION OF THE INVENTION

The present invention relates to crystalline polypeptides corresponding to the catalytic domain of receptor tyrosine kinases of the non-insulin receptor type. 5 Such tyrosine kinases include receptors of a class that are not covalently cross-linked but are understood to undergo ligand-induced dimerization, as well as cytoplasmic tyrosine kinases. Preferably, the crystalline catalytic domains are of sufficient quality to allow for the determination of the 10 three-dimensional X-ray diffraction structure to a resolution of about 1.5Å to about 2.5Å. The invention also relates to methods for preparing and crystallizing the polypeptides. The polypeptides themselves, as well as information derived from their crystal structures can be used to analyze and 15 modify tyrosine kinase activity as well as to identify compounds that interact with the catalytic domain.

The polypeptides of the invention are designed on the basis of the structure of a region in the cytoplasmic domain of the receptor tyrosine kinase that contains the catalytic 20 domain. By way of illustration, FIG. 6A shows the amino acid sequence alignment of the catalytic domains of eighteen human receptor tyrosine kinases; one representative member from each of the eighteen subfamilies is shown. FIG. 6B shows the alignment for cytoplasmic kinases. The applicants have 25 discovered and determined the boundaries of the domain required for crystallization of the resulting polypeptide. Surprisingly, these boundaries differ from that required for catalytic activity. For example, referring to FIG. 6A, the domain required for catalytic activity is generally believed 30 to span about 7 amino acid residues upstream of the first glycine (FIG. 6A residue number 485) of the N-terminal glycine-rich region through about 10 residues beyond the C-terminal conserved arginine (FIG. 6A, residue number 744). However, the Applicants have found that additional sequence 35 upstream of the N-terminal glycine-rich region and downstream of the C-terminal conserved arginine are required for crystallization. In particular, the Applicants have

determined that at least about 20 amino acid residues (+/- 5 amino acid residues) upstream of the first glycine (i.e., FIG. 6A, residue number 485) in the conserved glycine-rich region of the catalytic domain, and at least about 17 amino acid residues (+/- 5 amino acid residues) downstream of the conserved arginine (i.e., FIG. 6A, residue number 744) located at the C-terminal boundary of the catalytic domain are required to engineer a polypeptide suitable for crystallization.

10 In those situations where the resulting polypeptide contains cysteine residues that interfere with crystallization (e.g., cysteine residue numbers 488 and 584 in the FGF-R1 sequence shown in FIG. 6A), such cysteine residues can be substituted with an appropriate amino acid
15 that does not readily form covalent bonds with other amino acid residues under crystallization conditions; e.g., by substituting the cysteine with Ala, Ser or Gly. Any cysteine located in a non-helical or non- β -stranded segment, based on secondary structure assignments, are good candidates for
20 replacement. For example, cysteines located in regions corresponding to the glycine-rich-loop, the kinase insert, the juxtamembrane region or the activation loop are prime candidates for replacement. However, substitutions of cysteine residues that are conserved among the kinases (e.g.,
25 FIG. 6A at positions 725 and 736) are preferably avoided.

5.1 Crystalline Tyrosine Kinases

The crystals of the invention include native crystals, derivative crystals and co-crystals. The native crystals of
30 the invention generally comprise substantially pure polypeptides corresponding to the tyrosine kinase domain in crystalline form.

It is to be understood that the crystalline tyrosine kinase domains of the invention are not limited to naturally
35 occurring or native tyrosine kinase domains. Indeed, the crystals of the invention include mutants of native tyrosine kinase domains. Mutants of native tyrosine kinase domains

are obtained by replacing at least one amino acid residue in a native tyrosine kinase domain with a different amino acid residue, or by adding or deleting amino acid residues within the native polypeptide or at the N- or C-terminus of the native polypeptide, and have substantially the same three-dimensional structure as the native tyrosine kinase domain from which the mutant is derived.

By having substantially the same three-dimensional structure is meant having a set of atomic structure coordinates that have a root mean square deviation of less than or equal to about 2Å when superimposed with the atomic structure coordinates of the native tyrosine kinase domain from which the mutant is derived when at least about 50% to 100% of the Cα atoms of the native tyrosine kinase domain are included in the superposition.

Amino acid substitutions, deletions and additions which do not significantly interfere with the three-dimensional structure of the tyrosine kinase domain will depend, in part, on the region of the tyrosine kinase domain where the substitution, addition or deletion occurs. In highly variable regions of the molecule, such as those shown in FIG. 6, non-conservative substitutions as well as conservative substitutions may be tolerated without significantly disrupting the three-dimensional structure of the molecule. In highly conserved regions, or regions containing significant secondary structure, such as those regions shown in FIG. 6, conservative amino acid substitutions are preferred.

Conservative amino acid substitutions are well-known in the art, and include substitutions made on the basis of similarity in polarity, charge, solubility, hydrophobicity, hydrophilicity and/or the amphipathic nature of the amino acid residues involved. For example, negatively charged amino acids include aspartic acid and glutamic acid; positively charged amino acids include lysine and arginine; amino acids with uncharged polar head groups having similar hydrophilicity values include the following: leucine,

isoleucine, valine; glycine, alanine; asparagine, glutamine; serine, threonine; phenylalanine, tyrosine. Other conservative amino acid substitutions are well known in the art.

5 Of course, it is to be understood that for tyrosine kinase domains obtained in whole or in part by chemical synthesis, the selection of amino acids available for substitution or addition is not limited to the genetically encoded amino acids. Indeed, the mutants described herein
10 may contain non-genetically encoded amino acids. Conservative amino acid substitutions for many of the commonly known non-genetically encoded amino acids are well known in the art. Conservative substitutions for other amino acids can be determined based on their physical properties as
15 compared to the properties of the genetically encoded amino acids.

 In some instances, it may be particularly advantageous or convenient to substitute, delete and/or add amino acid residues to a native tyrosine kinase domain in order to
20 provide convenient cloning sites in cDNA encoding the polypeptide, to aid in purification of the polypeptide, etc. Such substitutions, deletions and/or additions which do not substantially alter the three dimensional structure of the native tyrosine kinase domain will be apparent to those
25 having skills in the art.

 It should be noted that the mutants contemplated herein need not exhibit PTK activity. Indeed, amino acid substitutions, additions or deletions that interfere with the kinase activity of the tyrosine kinase domain but which do
30 not significantly alter the three-dimensional structure of the domain are specifically contemplated by the invention. Such crystalline polypeptides, or the atomic structure coordinates obtained therefrom, can be used to identify compounds that bind to the native domain. These compounds
35 may affect the activity or the native domain.

 The derivative crystals of the invention generally comprise a crystalline tyrosine kinase domain polypeptide in

covalent association with one or more heavy metal atoms. The polypeptide may correspond to a native or a mutated tyrosine kinase domain. Heavy metal atoms useful for providing derivative crystals include, by way of example and not
5 limitation, gold, mercury, etc.

The co-crystals of the invention generally comprise a crystalline tyrosine kinase domain polypeptide in association with one or more compounds. The association may be covalent or non-covalent. Such compounds include, but are not limited
10 to, cofactors, substrates, substrate analogues, inhibitors, allosteric effectors, etc.

5.2 Production of Polypeptides

The native and mutated tyrosine kinase domain
15 polypeptides described herein may be chemically synthesized in whole or part using techniques that are well-known in the art (see, e.g., Creighton, 1983). Alternatively, methods which are well known to those skilled in the art can be used to construct expression vectors containing the native or
20 mutated tyrosine kinase domain polypeptide coding sequence and appropriate transcriptional/translational control signals. These methods include in vitro recombinant DNA techniques, synthetic techniques and in vivo recombination/genetic recombination. See, for example, the
25 techniques described in Maniatis et al., 1989 and Ausubel et al., 1989.

A variety of host-expression vector systems may be utilized to express the tyrosine kinase domain coding sequence. These include but are not limited to
30 microorganisms such as bacteria transformed with recombinant bacteriophage DNA, plasmid DNA or cosmid DNA expression vectors containing the tyrosine kinase domain coding sequence; yeast transformed with recombinant yeast expression vectors containing the tyrosine kinase domain coding
35 sequence; insect cell systems infected with recombinant virus expression vectors (e.g., baculovirus) containing the tyrosine kinase domain coding sequence; plant cell systems

infected with recombinant virus expression vectors (e.g., cauliflower mosaic virus, CaMV; tobacco mosaic virus, TMV) or transformed with recombinant plasmid expression vectors (e.g., Ti plasmid) containing the tyrosine kinase domain coding sequence; or animal cell systems. The expression elements of these systems vary in their strength and specificities. Depending on the host/vector system utilized, any of a number of suitable transcription and translation elements, including constitutive and inducible promoters, may be used in the expression vector. For example, when cloning in bacterial systems, inducible promoters such as pL of bacteriophage λ , plac, ptrp, ptac (ptrp-lac hybrid promoter) and the like may be used; when cloning in insect cell systems, promoters such as the baculovirus polyhedrin promoter may be used; when cloning in plant cell systems, promoters derived from the genome of plant cells (e.g., heat shock promoters; the promoter for the small subunit of RUBISCO; the promoter for the chlorophyll a/b binding protein) or from plant viruses (e.g., the 35S RNA promoter of CaMV; the coat protein promoter of TMV) may be used; when cloning in mammalian cell systems, promoters derived from the genome of mammalian cells (e.g., metallothionein promoter) or from mammalian viruses (e.g., the adenovirus late promoter; the vaccinia virus 7.5K promoter) may be used; when generating cell lines that contain multiple copies of the tyrosine kinase domain DNA, SV40-, BPV- and EBV-based vectors may be used with an appropriate selectable marker.

5.3 Crystallization Of Polypeptides And Characterization Of Crystal Structure

The native, derivative and co-crystals of the invention can be obtained by conventional means as are well-known in the art of protein crystallography, including batch, liquid bridge, dialysis, vapor diffusion and hanging drop methods (see, e.g., McPherson, 1982; McPherson, 1990; Webber, 1991).

Generally, the native crystals of the invention are grown by dissolving substantially pure tyrosine kinase domain

polypeptide in an aqueous buffer containing a precipitant at a concentration just below that necessary to precipitate the protein. Water is removed by controlled evaporation to produce precipitating conditions, which are maintained until
5 crystal growth ceases.

In a preferred embodiment of the invention, native crystals are grown by vapor diffusion in hanging drops (McPherson, 1982 and 1990). In this method, the polypeptide/precipitant solution is allowed to equilibrate in
10 a closed container with a larger aqueous reservoir having a precipitant concentration optimal for producing crystals. Generally, less than about 25 μ L of substantially pure polypeptide solution is mixed with an equal volume of reservoir solution, giving a precipitant concentration about
15 half that required for crystallization. This solution is suspended as a droplet underneath a coverslip, which is sealed onto the top of the reservoir. The sealed container is allowed to stand, usually for about 2-6 weeks, until crystals grow.

20 For crystals of the invention, it has been found that hanging drops containing about 2.0 μ L of tyrosine kinase domain polypeptide (10 mg/mL in 10mM Tris-HCl, pH 8.0, 10 mM NaCl and 2 mM dithiothreitol) and 2.0 μ L reservoir solution (16% w/v polyethylene glycol MW 10000, 0.3 M $(\text{NH}_4)_2\text{SO}_4$, 5% v/v
25 ethylene glycol or glycerol and 100 mM bis-Tris, pH 6.5) suspended over 0.5 mL reservoir buffer for about 3-4 weeks at 4°C provide crystals suitable for high resolution X-ray structure determination.

Of course, those having skill in the art will recognize
30 that the above-described crystallization conditions can be varied. Such variations may be used alone or in combination, and include polypeptide solutions containing polypeptide concentrations between 1 mg/mL and 60 mg/mL, Tris-HCl concentrations between 10 mM and 200 mM, dithiothreitol
35 concentrations between 0 mM and 20 mM, pH ranges between 5.5 and 7.5; and reservoir solutions containing polyethylene glycol concentrations between 10% and 30% (w/v), polyethylene

glycol molecular weights between 1000 and 20,000, $(\text{NH}_4)_2\text{SO}_4$ concentrations between 0.1 M and 0.5 M, ethylene glycol or glycerol concentrations between 0% and 20% (v/v), bis-Tris concentrations between 10 mM and 200 mM, pH ranges between 5 5.5 and 7.5 and temperature ranges between 0° C and 25°C. Other buffer solutions may be used such as HEPES buffer, so long as the desired pH range is maintained.

Derivative crystals of the invention can be obtained by soaking native crystals in mother liquor containing salts of heavy metal atoms. It has been found that soaking a native crystal in a solution containing about 0.1 mM to about 5 mM thimerosal, 4-chloromercuribenzoic acid or $\text{KAu}(\text{CN})_2$ for about 2 hr to about 72 hr provides derivative crystals suitable for use as isomorphous replacements in determining the X-ray crystal structure of the tyrosine kinase domain polypeptide.

Co-crystals of the invention can be obtained by soaking a native crystal in mother liquor containing compound that bind the kinase domain, or described above, or can be obtained by co-crystallizing the kinase domain polypeptide in the presence of one or more binding compounds.

For co-crystals of tyrosine kinase domain polypeptide in co-complex with AMP-PCP, it has been found that co-crystallizing the kinase domain polypeptide in the presence of AMP-PCP using the above-described crystallization conditions for obtaining native crystals with a polypeptide solution additionally containing 10 mM AMP-PCP and 20 mM MgCl_2 yields co-crystals suitable for the high resolution structure determination by X-ray crystallography. Of course, those having skill in the art will recognize that the concentrations of AMP-PCP and MgCl_2 in the polypeptide solution can be varied, alone or in combination with the variations described above for native crystals. Such variations include polypeptide solutions containing AMP-PCP concentrations between 0.1 mM and 50 mM and MgCl_2 concentrations between 0 mM and 50 mM.

Methods for obtaining the three-dimensional structure of the crystalline tyrosine kinase domains described herein, as

well as the atomic structure coordinates, are well-known in the art (see, e.g., Ducruix and Geige, 1992, and references cited therein).

5 5.4 Uses of the Crystals and Atomic Structure Coordinates

 The crystals of the invention, and particularly the atomic structure coordinates obtained therefrom, have a wide variety of uses. For example, the crystals described herein can be used as a starting material in any of the art-known
10 methods of use for receptor and non-receptor tyrosine kinases. Such methods of use include, for example, identifying molecules that bind to the native or mutated catalytic domain of tyrosine kinases. The crystals and structure coordinates are particularly useful for identifying
15 compounds that inhibit receptor and non-receptor tyrosine kinases as an approach towards developing new therapeutic agents (see, e.g., Levitzki and Gazit, 1995).

 The structure coordinates described herein can be used as phasing models in determining the crystal structures of
20 additional native or mutated tyrosine kinase domains, as well as the structures of co-crystals of such domains with ligands such as inhibitors, agonists, antagonists, etc. The structure coordinates, as well as models of the three-dimensional structures obtained therefrom, can also be used
25 to aid the elucidation of solution-based structures of native or mutated tyrosine kinase domains, such as those obtained via NMR. Thus, the crystals and atomic structure coordinates of the invention provide a convenient means for elucidating the structures and functions of receptor and non-receptor
30 tyrosine kinases.

 For purposes of clarity and discussion, the crystals of the invention will be described by reference to specific FLGK exemplary crystals. Those skilled in the art will appreciate that the principles described herein are generally applicable
35 to crystals of the tyrosine kinase domain of any cytoplasmic tyrosine kinase that undergoes ligand-induced dimerization or

receptor tyrosine kinase, including but not limited to the tyrosine kinases of FIG. 6.

5.5 Crystalline FLGK

5 In one illustrative embodiment, the invention provides crystals of FLGK. The crystals were obtained by the methods provided in the Examples. The FLGK crystals, which may be native crystals, derivative crystals or co-crystals, have monoclinic unit cells (i.e., unit cells wherein $a \neq b \neq c$;
10 $\alpha = \gamma = 90^\circ$; and $\beta > 90^\circ$) and space group symmetry C2. There are two FLGK molecules in the asymmetric unit, related by an approximate two-fold axis.

Two forms of crystalline FLGK were obtained. In one form (designated "C2-A form"), the unit cell has dimensions
15 of $a = 208.3 \pm 0.2 \text{ \AA}$, $b = 57.8 \pm 0.2 \text{ \AA}$, $c = 65.5 \pm 0.2 \text{ \AA}$ and $\beta = 107.2^\circ \pm 0.2^\circ$. In another form (designated "C2-B form"), the unit cell has dimensions of $a = 211.6 \pm 0.2 \text{ \AA}$, $b = 51.3 \pm 0.2 \text{ \AA}$, $c = 66.1 \pm 0.2 \text{ \AA}$ and $\beta = 107.7^\circ \pm 0.2^\circ$.

Three distinct two-fold related FLGK dimers are observed
20 in both the C2-A and C2-B forms of the FLGK crystal, one non-crystallographically related dimer and two crystallographically related dimers. The non-crystallographically related dimer comprises the two molecules in the asymmetric unit. The residues making up the
25 dimer interface are located in C-terminal lobe. In this dimer, the C-terminal lobes abut with the N-terminal lobes distal to one another. The total amount of surface area buried in the surface is about 950 \AA^2 . Very few of the interactions in the interface are of a specific nature, e.g.,
30 hydrogen-bonding or close packing of hydrophobic residues.

There are two crystallographically-related dimers in the C2 lattice. In the first dimer, the residues that constitute the dimer interface are limited to those in the β -sheet of the N-terminal lobe (amino acid residues 477, 479, 498, 506,
35 508 and 496). The total surface area buried in this interface is about 670 \AA^2 . The interactions are rather specific. Three hydrophobic residues which are partially

solvent-exposed in the monomer, Val-479, Ile-498 and Val-508, come together with their two-fold-related residues to form a compact hydrophobic plug. This plug is capped on either side by a salt bridge between Arg-477 and Glu-496. In addition, 5 two main-chain hydrogen-bonds connect the β -sheets of the two monomers at the start of β 3 (amino acid residues 506 and 508). The residues in this dimer interface, or their residue character, are generally conserved in the mammalian FGF receptors, but not in the invertebrate homologues.

- 10 The other crystallographically-related dimer buries about 1650 Å² in its interface. In this dimer, the α C helices of the two monomers are nearly parallel and contact each other at their C-terminal ends. Met-534 and Met-537 are in van der Waals contact with their two-fold-related residues.
- 15 Other hydrophobic contacts involve Pro-466 with Ile-648 and Pro-469 with Ile-676 and Thr-678. In addition, hydrogen bonds (side-chain to main-chain) are made between Arg-470 and Lys-618 and between His-649 and Glu-464, and there are several water molecules that bridge the two monomers through 20 hydrogen bonding.

In the C2-B form of the crystal, the monomers of this second crystallographically-related dimer are shifted slightly with respect to one another (6° rotation), indicating that this interface is somewhat fluid.

- 25 In both of the crystallographically-related dimers, the N-termini of the two molecules comprising the dimer point in the same direction and are reasonably close to one another.

5.5.1 Structures of FLGK and FLGK:AMP-PCP Co-Complex

- 30 The present invention also provides, for the first time, the high-resolution three-dimensional structures and atomic structure coordinates of crystalline FLGK and crystalline FLGK:AMP-PCP co-complex as determined by X-ray crystallography. The specific methods used to obtain the 35 structure coordinates are provided in the examples. The atomic structure coordinates of crystalline FLGK, obtained from the C2-A form of the crystal to 2.0 Å resolution, are

listed in Table 3; the coordinates of crystalline FLGK:AMP-PCP co-complex, obtained from the C2-A form of the crystal to 2.3 Å resolution are listed in Table 4.

Those having skill in the art will recognize that atomic structure coordinates as determined by X-ray crystallography are not without error. Thus, it is to be understood that any set of structure coordinates obtained for crystals of FLGK, whether native crystals, derivative crystals or co-crystals, that have a root mean square deviation ("r.m.s.d.") of less than or equal to about 1.5 Å when superimposed, using backbone atoms (N, C_α, C and O), on the structure coordinates listed in Table 3 or Table 4 are considered to be identical with the structure coordinates listed in the Tables when at least about 50% to 100% of the backbone atoms of FLGK are included in the superposition.

Referring now to FIG. 1, the overall structure of FLGK is bi-lobate. The N-terminal lobe of FLGK spans amino acid residues 456-567 (FIG. 3) and comprises a curled β-sheet of five anti-parallel strands (β1-β5) and one α-helix (αC). The C-terminal lobe spans amino acid residues 568-765 (FIG. 3) and comprises two β-strands (β7, β8) and seven α-helices (αD, αE, αEF, αF-αI). The secondary structure nomenclature follows that used for IRK (Hubbard et al., 1994) which in turn is based on the assignments for cAPK (Knighton et al., 1991). FIG. 2 shows a stereo view of a C_α trace of FLGK in the same orientation as FIG. 1.

A structure-based sequence alignment of the tyrosine kinase domains of human fibroblast growth factor receptor 1 (human FLGK; labelled FGFR1), human fibroblast growth factor receptors 2, 3 and 4 (labelled FGFR2, FGFR3 and FGFR4, respectively), a *D. melanogaster* homologue (labelled DFDFR1), a *C. elegans* homologue (labelled EGL-15) and insulin receptor kinase (labelled IRK), is shown in FIG. 3. The sequence of FLGK, which is not shown in FIG. 3 is identical to the sequence of FGFR1 except that FLGK has the following amino acid substitutions and additions: Cys-488 → Ala, Cys-584 → Ser, Leu-457 → Val and an additional five N-terminal amino

acids (Ser-Ala-Ala-Gly-Thr). The secondary structure assignments for FGFR1 and IRK were obtained using the Kabsch and Sander algorithm (Kabsch and Sander, 1983) as implemented in PROCHECK (Laskowski et al., 1993). In the FGF receptor sequences, a period represents sequence identity to FGFR1. In the IRK sequence, residues that are identical to FGFR1 are highlighted. A hyphen denotes an insertion.

The numbers under the EGL-15 sequence represent the fractional solvent accessibility (FSA2) of the residue in the FLGK structure. The FSA ratio is the ratio of the solvent-accessible surface area of a residue in a Gly-X-Gly tripeptide compared to that in the FLGK structure. A value of 0 represents an FSA between 0.00 and 0.09; 1 represents an FSA between 0.10 and 0.19, etc. The higher the value, the more solvent-exposed the residue. An asterisk or pound sign in the FSA line indicates that the residue (asterisk) or side chain (pound sign) is not included in the atom model due to disorder. The numbers below the FSA line are the FSAs for those residues that form part of a dimer interface.

The amino acid residue numbers for FGFR1, and hence FLGK, and IRK provided in FIG. 3 are used in the discussion that follows. Significant differences in the N-terminal lobe of FLGK as compared to IRK are found in the loops between β strands and in α C. Residues from the end of β 1 through the beginning of β 2 (amino acid residues 485-490) form the nucleotide-binding loop, named because of its role in ATP coordination. This residue stretch contains the protein kinase-conserved GXGXXG sequence motif, where X is any amino acid. This loop is poorly ordered in one FLGK molecule in the asymmetric unit and disordered (*i.e.*, not included in the atomic model) in the other FLGK molecule in the asymmetric unit. The loop between β 1 and β 3 is disordered in both FLGK molecules comprising the asymmetric unit.

Referring now to FIG. 4A, which provides a ribbon diagram of the N-terminal lobes of FLGK and IRK in which the C_{α} atoms of the β -sheets have been superimposed, it can be seen that in FLGK α C is longer by one helical turn than in

IRK and is oriented such that residues Lys-514 and Glu-531, which are conserved in protein kinases, form a salt bridge (represented by a black line). While not intending to be bound by theory, this salt bridge is believed to be important for proper positioning of the conserved lysine side chain, which coordinates two phosphate oxygens of ATP. The salt bridge is observed in the structures of cAPK (Knighton et al., 1991) and mitogen-activated protein kinase (MAPK) (Zhang et al., 1994).

10 Referring now to FIG. 4B, which provides a ribbon diagram of the C-terminal lobes of FLGK and IRK in which the C_α atoms of the α-helices have been superimposed, a significant difference is found in the C-terminal helix of FLGK when compared to IRK; helix αI of FLGK is longer by
15 seven residues (two helical turns) than its counterpart in IRK. The extended length of αI is presumably important in the biological functioning of FGF receptors, since the tyrosine autophosphorylation site to which an SH2 domain of PLCγ binds is six residues C-terminal to this helix.

20 The structure of FLGK displays an open disposition of the N- and C-terminal lobes. Despite having different sets of lattice contacts, the two FLGK molecules in the asymmetric unit have only a 2° difference in relative lobe orientation. It appears as though the steric interaction between residues
25 in αC (Glu-531 and Met-534) with Phe-642 and Gly-643 of the protein kinase-conserved DFG sequence at the beginning of the activation loop accounts for the open conformation of FLGK.

The active site of FLGK is characterized by at least amino acid residues spanning the catalytic loop, activation
30 loop and nucleotide binding loop. Unlike the structure of IRK, in which Tyr-1162 occupies the active site of the molecule, the active sites of both FLGK molecules in the asymmetric unit are unoccupied.

The activation loop, which regulates phosphorylation, is
35 characterized by at least residues 640 to 663. Quite surprisingly, while the activation loops of FLGK and IRK contain the same number of amino acid residues and share

greater than 50% sequence homology, the paths of the polypeptide chains are strikingly dissimilar, diverging at Ala-640 (Gly-1149 in IRK) and reconverging at Val-664 (Val-1173 in IRK). Tyr-653 and Tyr 564 are not bound in the
5 active site. Instead, these residues point away from it. Tyr-653 is in van der Waals contact with several hydrophobic residues (Val-664, Leu-672 and Phe-710) and is hydrogen-bonded via its hydroxyl group to a backbone carbonyl oxygen (Leu-672). Tyr-654 is more solvent exposed than Tyr-653, and
10 its only van der Waals contact is with Val-706. Temperature factor data suggest that the activation loop is relatively mobile and adopts multiple conformations.

The catalytic loop of protein kinases lies between secondary structure elements αE and $\beta 7$ and contains an
15 invariant aspartic acid residue (Asp-623 in FLGK) which serves as the catalytic base in the phosphotransfer reaction, abstracting the proton from the hydroxyl group of the substrate tyrosine, serine or threonine. The catalytic loop sequence of FLGK comprises at least residues His-621 to Asn-
20 628 (amino acid sequence HRDLAARN), and is identical to that for IRK and most receptor and non-receptor PTKs.

In addition to the two tyrosine autophosphorylation sites in the activation loop (Tyr-653 and Tyr-654), there are four other autophosphorylation sites present in the FLGK
25 crystals of the invention: one in the juxtamembrane region (Tyr-463), two in the kinase insert (Tyr-583 and Tyr-585) and one in the C-terminal lobe (Tyr-730) (Mohammadi et al., 1996). They exhibit varying degrees of conservation in mammalian FGF receptors: Tyr-463 and Tyr-585 in FGFR1 and 2;
30 Tyr-583 in FGFR1, 2 and 3; and Tyr-730 in FGFR 1, 2, 3 and 4 (FIG. 3).

Referring now to FIG. 5, the positions of the autophosphorylation sites are mapped onto the FLGK structure. The juxtamembrane site (Tyr-463) and the residues N-terminal
35 to it are disordered in one of the FLGK molecules in the asymmetric unit. In the other molecule in the asymmetric unit Tyr-463 is involved in a lattice contact.

The kinase insert region (the region between helices α D and α E) contains autophosphorylation sites Tyr-583 and Tyr-585 and is disordered in both FLGK molecules in the asymmetric unit of the C2-A form of the crystal. In the C2-B
5 form, several lattice contacts partially pin down this region in one of the two FLGK molecules in the asymmetric unit, allowing a trace of the polypeptide chain to be made. There is no well-defined secondary structure for these residues. Tyr-730, situated in α H in the C-terminal lobe, is nearly
10 buried and the side-chain hydroxyl group makes two hydrogen-bonds. The side chains of neighboring Met-732 and Met-733 are both buried. Therefore, phosphorylation of Tyr-730 would presumably require prior unfolding of α H.

Aside from Tyr-730, the five other autophosphorylation
15 sites (including Tyr-653 and Tyr-654) are found in relatively mobile segments of the FLGK molecule. While not intending to be bound by theory, the spatial positions of the autophosphorylation sites relative to the active site suggest that autophosphorylation occurs by a trans mechanism between
20 two kinase domains, supporting the hypothesis that ligand-induced receptor dimerization is critical for the initiation of autophosphorylation events.

The structure of crystalline FLGK:AMP-PCP co-complex is essentially similar to that observed for crystalline FLGK.
25 There are no significant changes in the structure of FLGK induced by AMP-PCP binding. In particular, binding of AMP-PCP, and by extension ATP, does not by itself promote lobe closure under the crystallization conditions used. Furthermore, complexation did not result in any noticeable
30 changes in the conformations of the activation and nucleotide-binding loops.

The crystalline FLGK:AMP-PCP co-complex contains hydrogen bonds that are present between N1 of adenine and the amide nitrogen of Ala-564 and between N6 of adenine and the
35 carbonyl oxygen of Glu-562. The adenine ring is flanked on one side by Leu-484 and Val-492 (N-terminal lobe) and on the other side by Leu-630 (C-terminal lobe). The ribose hydroxyl

groups make no direct hydrogen bonds with protein atoms. Lys-514 is hydrogen-bonded to oxygens of the β - and γ -phosphates. There is no unambiguous electron density that would indicate the positions of Mg^{2+} ions. Generally, AMP-PCP appears to be coordinated rather loosely to unphosphorylated FLGK, being bound to the "roof" of the cleft rather than being tightly sandwiched between the two kinase lobes.

5.5.2 Structural Differences Between FGF-R and IRK

10 Several features distinguish the FGF-receptor structure from that of the insulin-receptor tyrosine kinase. These distinctions are likely to be important in signalling by FGF-receptors, and other monomeric receptors that are believed to undergo ligand-induced dimerization.

15 The most significant difference between the structures of FGFR1K and IRK is the conformation of the activation loop. In FGFR1K, the activation loop is disposed such that the binding site for substrate peptides is blocked not by an activation loop tyrosine, as in IRK, but by Arg-661 and PTK-
20 invariant Pro-663, while the ATP binding site is accessible. This represents another molecular mechanism by which a receptor PTK may be autoinhibited. The observed autoinhibition in FGFR1K would appear to be weaker than that in IRK because of fewer specific interactions made by
25 residues in the FGFR1K activation loop (manifested in the relatively higher B-values) and the accessibility of the ATP site. One obvious distinction between the insulin and FGF receptor families is that in the former, receptors are covalently linked heterotetramers ($\alpha_2\beta_2$), whereas in the
30 latter, receptor dimerization is ligand dependent. Receptors whose kinase domains are always in close proximity may require a stronger autoinhibition mechanism than those receptors that associate only upon ligand binding (Taylor et al., 1995). Since most growth factor receptors undergo
35 ligand-dependent dimerization and activation, the FGF receptor autoinhibition mechanism appears to be a more general one.

6. Example: Preparation Of Crystals
Of The Catalytic Domain Of The FGF-R-1

The subsections below describe the production of a polypeptide containing the catalytic domain of the FGF-receptor-1, and the preparation and characterization of crystals, derivative crystals and co-crystals of sufficient quality for X-ray diffraction analysis.

6.1 Production and Purification of FLGK

10 A recombinant baculovirus (Pharmingen, CA) was engineered to encode the protein of SEQ ID NO:3. Compared to the sequence of human FLGK (SEQ ID NO:1), the protein of SEQ ID NO:3 has a cleavable histidine tag (MRGSHHHHHHGMASMTGGQQMGRDLYDDDDKDTSSR) fused to the N-terminus to aid in protein purification. Also, three amino acid substitutions were introduced: Cys-488→Ala, Cys-584→Ser and Leu-457→Val. The two cysteine substitutions were made to prevent the formation of disulfide-linked oligomers, which occurs for the native protein. The substitution Leu-457→Val was necessary to introduce a NcoI cloning site near Met-456. 20 The codon for Tyr-766 (TAC) was changed to a stop codon (TAG) and a HindIII-cloning site was generated following this stop codon. These substitutions were introduced into the full length cDNA of human FLGK (SEQ ID NO:4) in m13MP19 by site-directed mutagenesis using an in vitro mutagenesis kit 25 according to the manufacturer's protocol (Amersham). The resulting construct was digested with NcoI and HindIII and was ligated into appropriately digested pBlueBac HistagB (Invitrogen). Transfection of insect cells (Sf9) was performed with the BaculoGold transfection system according 30 to the manufacturer's protocol (Pharmingen). Following identification of positive plaques, the recombinant baculovirus was amplified to high titer (5×10^7 virus particles/ml). Sf9 cells were grown in 175-cm² flasks to a density of $2-3 \times 10^7$ per flask and infected with recombinant 35 baculovirus with a multiplicity of infection (MOI) of ten (10). After 48 hrs., cells were harvested by centrifugation

at 3,000g for 35 min. at 4°C and then lysed in lysis buffer (25 mM HEPES, pH 7.5, 150 mM NaCl, 10% glycerol, 1.5 mM MgCl₂, 1% Triton X-100, 10 µg/ml aprotinin, 10 µg/ml leupeptin and 1 mM phenylmethylsulfonyl fluoride (PMSF)). Lysates were
5 centrifuged in a Sorval RC 5C centrifuge (Dupont) for 1 hr at 4°C at 40,000g followed by ultracentrifugation in an XL-80 ultracentrifuge (Beckman) at 100,000g for 1 hr. After centrifugation, the clarified lysate was passed over a Ni²⁺-chelating column (Pharmacia), and the bound histidine-tagged
10 fusion protein was eluted with 100 mM imidazole (pH 7.5). Pooled fractions were loaded onto a Mono Q anion exchange column (Pharmacia) and eluted with a NaCl gradient from 0 to 500 mM. The fractions containing the fusion protein were concentrated in a Centricon-30 (Amicon), and the histidine
15 tag was removed by overnight digestion with enterokinase (Biozyme) at 20°C. The digestion was terminated by the addition of aprotinin, leupeptin, PMSF, TPCK (tosyl-L-phenylalanine chloromethyl ketone) and bovine pancreatic trypsin inhibitor (BPTI). The cleaved kinase domain was then
20 separated from the histidine tag on a Superose 12 size-exclusion column (Pharmacia). The eluted kinase domain was further purified on a Mono Q column. The purified kinase domain was analyzed by N-terminal sequencing and mass spectrometry. Five amino acids (SAAGT) remained from the
25 histidine tag. The predicted molecular mass was confirmed by mass spectrometry. The amino acid sequence of the purified protein (FLGK) is provided in SEQ ID NO:2.

6.1.1 Preparation Of FLGK Native Crystals

30 FLGK native crystals (C2-A form) were grown at 4°C by vapor diffusion in hanging drops (McPherson, 1990). 2 µL FLGK (SEQ ID NO:2) (20-mg/mL in 10 mM Tris-HCl, 10 mM NaCl, 2 mM DTT, pH 8.0) was mixed with an equal volume (2 µL) of reservoir buffer (16% w/v polyethylene glycol MW 10,000,
35 0.3 M (NH₄)₂SO₄, 5% v/v ethylene glycol, 100 mM bis-Tris, pH 6.5) and allowed to stand over 0.5 ml reservoir solution at 4°C. Irregular crystals typically grew to 0.6 x 0.3 x 0.2 mm

over a period of 3-4 weeks. The solvent content of the crystal was 55% (assuming a partial specific volume of 0.73 cm³/gm).

FLGK native crystals (C2-B form) were grown as described above using a reservoir buffer containing 5% v/v glycerol instead of ethylene glycol. The solvent content of the crystal was 50% (assuming a partial specific volume of 0.73 cm³/gm).

10 6.1.2 Preparation Of Heavy Atom Derivative Crystals

Heavy atom derivative crystals were obtained by soaking FLGK native crystals (C2-A form) in a solution containing ethylmercurithiosalicylic acid (thimerosal), KAu(CN)₂ or 4-chloromercuribenzoic acid, as provided in Table 1, *infra*, and containing 25% PEG 10000, 0.3M (NH₄)₂SO₄, 5% ethylene glycol or glycerol, and 100 mM bis-Tris (pH 6.5), and were flash-cooled either in liquid nitrogen directly (Synchrotron) or in a dry nitrogen stream at -175°C (rotating anode).

20 6.1.3 Preparation Of FLGK:AMP-PCP Co-Crystals

Crystals of FLGK complexed with AMP-PCP were obtained as described in Example 6.1.1, except that the protein solution additionally contained 10 mM AMP-PCP and 20 mM MgCl₂.

25 6.2 Analysis And Characterization Of FLGK Crystals

6.2.1 Diffraction Data Collection

Data were collected either on a Rigaku RU-200 rotating anode operated at 50 kV and 100 mA (Cu K α) and equipped with double-focusing mirrors and an R-AXIS IIC image plate detector, or at beamline X-4A at the National Synchrotron Light Source, Brookhaven National Laboratory. Synchrotron data ($\lambda=1.07\text{\AA}$) were collected on Fuji image plates and read with a Fuji scanner. One cryo-cooled crystal was used for each of the data sets. To obtain cryo-cooled crystals, crystals were soaked in a cryo-protectant solution containing 25% PEG 10000, 0.3 M (NH₄)₂SO₄, 5% ethylene glycol or glycerol

and 100 mM bis-Tris (pH 6.5), and were flash-cooled either in liquid nitrogen directly (synchrotron data) or in a dry nitrogen stream at -175°C (rotating anode data). All data were processed using DENZO and SCALEPACK (Otwinowski, 1993).

5

6.2.2 Structure Determination

A molecular replacement solution was found initially for the C2-B crystal form using an IRK search model that consisted of polyalanine plus the common side chains for
10 residues 993-1263 (FLGK residues 475-754), excluding residues 1094-1105 (kinase insert) and 1153-1170 (activation loop). With AMORE (Navaza, 1994), using 80% of the structure factor amplitudes between 15.0 and 3.5 Å, one of the two molecules in the asymmetric unit was located. The correlation
15 coefficient (c.c.) for the correct 1-molecule solution was 0.23 (versus 0.20 for the highest incorrect solution). This molecule was rigid body-refined in X-PLOR (Brünger, 1992), first as one rigid body unit, then as two units each comprising a lobe of the kinase. Rigid body refinement
20 (12.0-3.5 Å, $F > 3\sigma$) resulted in a relative rotation of the two lobes of ~10° and an increase of the c.c. from 0.20 to 0.25. The rigid body-refined molecule was then used as a new search model in AMORE, and this time both molecules in the asymmetric unit were located. The c.c. for the correct 2-
25 molecule solution was 0.35 (versus 0.27 for the highest incorrect solution).

Multiple cycles of model building and refinement against 6.0-2.4 Å data resulted in the addition to the model of many of the side chains and some of the missing polypeptide chain.
30 Model building was performed using TOM/FRODO (Jones, 1985) and conjugate-gradient minimization and simulated annealing were performed using X-PLOR (Brünger, 1992). At this stage, the R-value was 30% (free R-value of 36%). To help expedite model building and refinement, experimental phases were
35 obtained. Because crystals grown in the presence of ethylene glycol were easier to manipulate than those grown in glycerol, several heavy-atom derivative data sets were

collected from C2-A crystals that had been soaked in various heavy atom solutions. The C2-B structure was subsequently refined against 6.0-2.4 Å data to an R-value of 23.8% (free R-value of 30.4%) with r.m.s.d. values of 0.008 Å for bond distances and 1.4° for bond angles.

Molecular replacement was used to locate the two FLGK molecules (designated FLGK-A and FLGK-B) in the asymmetric unit of the C2-A crystal form. Using AMORE with 80% of structure factor amplitudes between 15.0 and 3.5 Å and the
10 C2-B model, the c.c. for the correct 2-molecule solution was 0.62 (versus 0.35 for the highest incorrect solution). Heavy atom positions were determined from difference Fourier maps using the calculated phases from the partial model.

Refinement of heavy atom parameters and phase determination
15 were performed with MLPHARE (Otwinowski, 1991). An initial molecular isomorphous replacement (MIR)-phased electron density map was calculated with data between 2.0. and 2.8 Å resolution. This map was improved by solvent flattening, histogram matching, and non-crystallographic symmetry (NCS)
20 averaging using DM (Cowtan, 1994).

Refinement of the C2-A FLGK structure against 6.0-2.0 Å data proceeded by conjugate-gradient minimization and simulated annealing using X-PLOR. Tight NCS restraints were imposed until data to 2.0 Å resolution were included in the
25 refinement, at which point the restraints were lifted. An overall anisotropic B-value was calculated using X-PLOR and applied to the observed structure factors, reducing the R-value by ~3%. Water molecules whose B-values refined to ≥ 70 Å² were omitted from the subsequent refinement round. The
30 average B-value is 37.5 Å² for all protein atoms, 35.4 Å² for protein atoms in FLGK-A, 39.7 Å² for protein atoms in FLGK-B, and 40.2 Å² for water molecules. The side chains for Cys-603 in FLGK-A and FLGK-B and for Met-534 in FLGK-B have been modeled in two different conformations. Residues that are
35 not included in the atomic model due to poor supporting electron density are for FLGK-A: 456-463, 486-490, 501-504,

580-591, 763-765; and for FLG-B: 456-460, 501-504, 578-593, 646-651, 657-659, 762-765.

The positions of the two AMP-PCP molecules (one per FLGK molecule) were easily identified in $2F_{\text{obs}(\text{co-complex})} - F_{\text{calc}(\text{FLGK})}$ difference Fourier maps. The AMP-PCP molecule bound to FLGK-B is less tightly bound and has been modeled with an occupancy of 0.5.

The following table summarizes the X-ray crystallography data sets of FLGK derivative crystals that were used to determine the structures of crystalline FLGK and crystalline FLGK:AMP-PCP co-complex of the invention.

15

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TABLE 1

Data Collection and MIR Phasing Summary						
	Native	AMP-PCP	Thi-1 ^a	Thi-2 ^a	PCMB ^a	KAu(CN) ₂
5 X-ray source	X-4A	RU-200	RU-200	RU-200	RU-200	RU-200
Resolution limit (Å)	2.0	2.3	2.6	2.8	2.8	2.8
Number of sites	—	—	4	7	2	2
Conc. (mM)/time (h)	—	—	0.1/24	0.1/48	0.2/2	5.0/72
10 R _{sym} ^b (%)	4.8(19.7) ^c	4.5(23.3) ^c	5.5	9.8	6.8	6.8
Total observations	122569	91324	55456	59488	67988	45303
Unique reflections	50771	31997	42820 ^d	35538 ^d	18619	18202
Completeness (%)	97.3(96.3) ^c	95.5(93.7) ^c	95.0	96.7	98.0	97.7
Signal (%1 > 3σ)	80.7(50.3) ^c	79.6(51.7) ^c	69.8	66.8	84.7	77.6
15 R _{iso} ^e (%)	—	—	17.1	31.2	15.4	15.2
Phasing power ^f	—	—	1.8	2.0	1.0	0.9
R _{critic} ^g (%)	—	—	0.55	0.50	0.81	0.84
Overall FOM ^h	0.60					
20						

^aThi-1, Thi-2; ethylmercurithiosalicylic acid (thimerosal); PCMB: 4-chloromercuribenzoic acid.

^bR_{sym} = 100 × Σ_h Σ_i |I_i(h) - <I(h)>| / Σ_h Σ_i I_i(h)

^cValue in parentheses is for the highest resolution shell.

^dI(+h) and I(-h) processed as independent reflections. Anomalous scattering contributions were included.

25 ^eR_{iso} = 100 × Σ_h ||F_p(h) ± F_p(h)| - |F_{PH}(h)|| / Σ_h |F_p(h)|, where F_p and F_{PH} are the native and derivative structure factors, respectively.

^fPhasing power: r.m.s. heavy atom structure factor / r.m.s. lack of closure (for acentric reflections from 20.0 to 2.8 Å).

^gR_{critic} = 100 × Σ_h ||F_{PH}(h) - F_{H(calc)}(h)| / Σ_h |F_{PH}(h) ± F_p(h)| (for centric reflections from 20.0 to 2.8 Å).

30 ^hFigure of merit: ∫ P(φ)exp(iφ)dφ / ∫ P(φ)d(φ), where P is the probability distribution of the phase angle φ.

6.2.3 Structure Analyses

Atomic superpositions were performed with TOSS (Hendrickson, 1979). Per residue solvent accessible surface calculations were done with X-PLOR. The surface area buried in a dimer interface was calculated with GRASP (Nicholls et

al., 1991) using a probe radius of 1.4 Å. The stereochemical quality of the atomic model was monitored using PROCHECK (Laskowski et al., 1993). As defined in PROCHECK, 93% of the residues in the model have main-chain torsion angles in the 5 most favored Ramachandran regions. There are no residues in disallowed regions, and three residues in generously allowed regions: Arg-622 in FLGK-A and FLGK-B and Arg-554 in FLGK-A. The overall G-factor score is 0.42.

The following table summarizes the X-ray crystallography 10 refinement parameters of the structures of crystalline FLGK and crystalline FLGK:AMP-PCP co-complex of the invention.

TABLE 2

Refinement Parameters						
15 FLGK: 550 residues, 252 water molecules (4589 atoms)						
FLGK:AMP-PCP: 550 residues, 238 water molecules, 2 AMP-PCP molecules (4638 atoms)						
Model	d-spacings	Reflections	R-value ^a	R.m.s.d.		
	(Å)	(N)	(%)	bonds (Å)	angles (°)	B-values ^b (Å ²)
20 FLGK:	6.0-2.0	42548	21.3 (26.2) ^c	0.008	1.3	1.6
FLGK:AMP-PCP:	6.0-2.3	26729	20.1 (27.5) ^c	0.009	1.4	1.7

^aR-value = $100 \times \sum_h ||F_{obs}(h)| - |F_{calc}(h)|| / \sum_h |F_{obs}(h)|$ for reflections with $F_{obs} > 2\sigma$.

25 ^bFor bonded protein atoms.

^cValue in parentheses is the free R-value (Brünger, 1993) determined from 5% of the data.

Tables 3 and 4, following this page, provide the atomic structure coordinates of unphosphorylated FLGK and 30 unphosphorylated FLGK:AMP-PCP co-complex, respectively. In the Tables, coordinates for both of the FLGK molecules of the dimer comprising the asymmetric unit are provided. The amino acid residue numbers coincide with those used in FIG. 3. In the first FLGK molecule of the dimer the residue number is 35 preceded by a 1, i.e., residue number 464 of the first FLGK molecule of the dimer is denoted by "1464".

TABLE 3
Atomic Structure Coordinates of Unphosphorylated FLGK

	Atom No.	Atom Type	A.A. Type	A.A. No.	X	Y	Z	OCC	B
5	ATOM 1	N	GLU	1464	-13.639	16.975	8.571	1.00	54.29
	ATOM 3	CA	GLU	1464	-12.479	17.105	7.695	1.00	52.62
	ATOM 4	CB	GLU	1464	-11.400	17.974	8.349	1.00	54.64
	ATOM 5	C	GLU	1464	-11.914	15.738	7.319	1.00	49.74
	ATOM 6	O	GLU	1464	-11.845	15.407	6.136	1.00	52.04
	ATOM 7	N	LEU	1465	-11.562	14.925	8.310	1.00	44.95
	ATOM 9	CA	LEU	1465	-11.018	13.599	8.037	1.00	41.04
	ATOM 10	CB	LEU	1465	-10.236	13.066	9.235	1.00	40.18
	ATOM 11	CG	LEU	1465	-8.719	13.196	9.130	1.00	43.70
	ATOM 12	CD1	LEU	1465	-8.346	14.654	8.891	1.00	46.74
10	ATOM 13	CD2	LEU	1465	-8.061	12.671	10.395	1.00	40.72
	ATOM 14	C	LEU	1465	-12.092	12.594	7.656	1.00	39.18
	ATOM 15	O	LEU	1465	-13.187	12.590	8.219	1.00	38.05
	ATOM 16	N	PRO	1466	-11.802	11.748	6.657	1.00	37.20
	ATOM 17	CD	PRO	1466	-10.597	11.793	5.810	1.00	36.41
	ATOM 18	CA	PRO	1466	-12.741	10.727	6.189	1.00	36.13
	ATOM 19	CB	PRO	1466	-12.110	10.262	4.878	1.00	37.50
	ATOM 20	CG	PRO	1466	-10.629	10.459	5.135	1.00	36.20
	ATOM 21	C	PRO	1466	-12.846	9.595	7.201	1.00	35.61
	ATOM 22	O	PRO	1466	-11.847	9.174	7.788	1.00	35.18
15	ATOM 23	N	GLU	1467	-14.060	9.121	7.429	1.00	35.38
	ATOM 25	CA	GLU	1467	-14.268	8.053	8.377	1.00	35.43
	ATOM 26	CB	GLU	1467	-15.744	7.965	8.746	1.00	41.10
	ATOM 27	CG	GLU	1467	-16.375	9.280	9.098	1.00	48.25
	ATOM 28	CD	GLU	1467	-17.819	9.145	9.596	1.00	50.24
	ATOM 29	OE1	GLU	1467	-18.446	8.071	9.378	1.00	52.82
	ATOM 30	OE2	GLU	1467	-18.314	10.109	10.230	1.00	51.26
	ATOM 31	C	GLU	1467	-13.838	6.714	7.801	1.00	32.65
	ATOM 32	O	GLU	1467	-13.899	6.511	6.591	1.00	35.06
	ATOM 33	N	ASP	1468	-13.299	5.854	8.659	1.00	30.46
	ATOM 35	CA	ASP	1468	-12.883	4.516	8.262	1.00	28.85
	ATOM 36	CB	ASP	1468	-11.384	4.424	7.975	1.00	29.34
	ATOM 37	CG	ASP	1468	-10.985	3.072	7.408	1.00	27.57
	ATOM 38	OD1	ASP	1468	-11.833	2.159	7.359	1.00	27.78
	ATOM 39	OD2	ASP	1468	-9.817	2.916	7.003	1.00	30.64
	ATOM 40	C	ASP	1468	-13.252	3.564	9.384	1.00	29.29
	ATOM 41	O	ASP	1468	-12.481	3.364	10.336	1.00	27.76
	ATOM 42	N	PRO	1469	-14.435	2.939	9.268	1.00	28.99
	ATOM 43	CD	PRO	1469	-15.354	3.091	8.120	1.00	28.09
	ATOM 44	CA	PRO	1469	-14.971	1.987	10.244	1.00	30.01
25	ATOM 45	CB	PRO	1469	-16.244	1.473	9.553	1.00	33.33
	ATOM 46	CG	PRO	1469	-16.665	2.630	8.690	1.00	30.53
	ATOM 47	C	PRO	1469	-14.012	0.848	10.563	1.00	28.96
	ATOM 48	O	PRO	1469	-14.085	0.251	11.636	1.00	28.52
	ATOM 49	N	ARG	1470	-13.106	0.556	9.631	1.00	27.59
	ATOM 51	CA	ARG	1470	-12.139	-0.520	9.810	1.00	27.37
	ATOM 52	CB	ARG	1470	-11.301	-0.707	8.533	1.00	28.84
	ATOM 53	CG	ARG	1470	-12.049	-1.279	7.317	1.00	30.57
	ATOM 54	CD	ARG	1470	-11.137	-1.352	6.068	1.00	26.71
	ATOM 55	NE	ARG	1470	-10.489	-0.068	5.793	1.00	31.26
	ATOM 57	CZ	ARG	1470	-9.603	0.151	4.823	1.00	32.60
	ATOM 58	NH1	ARG	1470	-9.241	-0.828	3.999	1.00	33.19
	ATOM 61	NH2	ARG	1470	-9.067	1.359	4.686	1.00	28.65
	ATOM 64	C	ARG	1470	-11.180	-0.285	10.981	1.00	29.21
	ATOM 65	O	ARG	1470	-10.757	-1.230	11.641	1.00	28.47
35	ATOM 66	N	TRP	1471	-10.909	0.977	11.280	1.00	27.80
	ATOM 68	CA	TRP	1471	-9.940	1.314	12.306	1.00	28.62
	ATOM 69	CB	TRP	1471	-8.729	1.944	11.609	1.00	24.97
	ATOM 70	CG	TRP	1471	-8.044	0.976	10.728	1.00	24.86
	ATOM 71	CD2	TRP	1471	-7.156	-0.060	11.144	1.00	28.00

	ATOM	72	CE2	TRP	1471	-6.782	-0.776	9.989	1.00	29.23
	ATOM	73	CE3	TRP	1471	-6.642	-0.460	12.389	1.00	26.59
	ATOM	74	CD1	TRP	1471	-8.166	0.860	9.374	1.00	27.23
	ATOM	75	NE1	TRP	1471	-7.413	-0.192	8.922	1.00	30.10
	ATOM	77	CZ2	TRP	1471	-5.912	-1.866	10.036	1.00	28.70
	ATOM	78	CZ3	TRP	1471	-5.778	-1.545	12.435	1.00	27.18
	ATOM	79	CH2	TRP	1471	-5.424	-2.237	11.266	1.00	27.23
5	ATOM	80	C	TRP	1471	-10.371	2.223	13.440	1.00	28.42
	ATOM	81	O	TRP	1471	-9.664	2.321	14.442	1.00	26.48
	ATOM	82	N	GLU	1472	-11.521	2.874	13.293	1.00	28.62
	ATOM	84	CA	GLU	1472	-11.981	3.823	14.297	1.00	27.16
	ATOM	85	CB	GLU	1472	-13.245	4.534	13.799	1.00	28.89
	ATOM	86	CG	GLU	1472	-13.552	5.869	14.520	1.00	29.09
	ATOM	87	CD	GLU	1472	-12.692	7.042	14.054	1.00	26.43
	ATOM	88	OE1	GLU	1472	-12.134	7.009	12.938	1.00	28.59
	ATOM	89	OE2	GLU	1472	-12.596	8.024	14.801	1.00	27.28
10	ATOM	90	C	GLU	1472	-12.217	3.269	15.701	1.00	25.10
	ATOM	91	O	GLU	1472	-12.763	2.196	15.861	1.00	26.48
	ATOM	92	N	LEU	1473	-11.750	3.991	16.711	1.00	24.65
	ATOM	94	CA	LEU	1473	-11.962	3.608	18.104	1.00	26.27
	ATOM	95	CB	LEU	1473	-10.645	3.266	18.817	1.00	28.24
	ATOM	96	CG	LEU	1473	-10.750	3.025	20.337	1.00	27.23
	ATOM	97	CD1	LEU	1473	-11.323	1.636	20.642	1.00	25.23
	ATOM	98	CD2	LEU	1473	-9.390	3.183	21.000	1.00	26.33
	ATOM	99	C	LEU	1473	-12.546	4.856	18.740	1.00	26.52
15	ATOM	100	O	LEU	1473	-12.122	5.973	18.411	1.00	25.16
	ATOM	101	N	PRO	1474	-13.610	4.703	19.554	1.00	28.52
	ATOM	102	CD	PRO	1474	-14.435	3.500	19.770	1.00	29.65
	ATOM	103	CA	PRO	1474	-14.215	5.870	20.207	1.00	29.18
	ATOM	104	CB	PRO	1474	-15.368	5.251	21.003	1.00	28.58
	ATOM	105	CG	PRO	1474	-15.768	4.097	20.154	1.00	28.17
	ATOM	106	C	PRO	1474	-13.173	6.528	21.124	1.00	29.75
	ATOM	107	O	PRO	1474	-12.427	5.841	21.828	1.00	31.78
	ATOM	108	N	ARG	1475	-13.107	7.849	21.097	1.00	30.76
20	ATOM	110	CA	ARG	1475	-12.149	8.588	21.900	1.00	32.26
	ATOM	111	CB	ARG	1475	-12.362	10.083	21.743	1.00	31.58
	ATOM	112	CG	ARG	1475	-12.178	10.536	20.342	1.00	37.54
	ATOM	113	CD	ARG	1475	-12.048	12.027	20.206	1.00	36.96
	ATOM	114	NE	ARG	1475	-11.733	12.317	18.813	1.00	40.07
	ATOM	116	CZ	ARG	1475	-10.503	12.501	18.352	1.00	37.59
	ATOM	117	NH1	ARG	1475	-9.470	12.447	19.186	1.00	34.89
	ATOM	120	NH2	ARG	1475	-10.308	12.669	17.049	1.00	34.54
	ATOM	123	C	ARG	1475	-12.173	8.261	23.371	1.00	35.58
25	ATOM	124	O	ARG	1475	-11.135	8.318	24.036	1.00	37.03
	ATOM	125	N	ASP	1476	-13.356	7.958	23.889	1.00	36.68
	ATOM	127	CA	ASP	1476	-13.498	7.647	25.307	1.00	37.07
	ATOM	128	CB	ASP	1476	-14.967	7.759	25.740	1.00	37.87
	ATOM	129	CG	ASP	1476	-15.851	6.704	25.115	1.00	38.93
	ATOM	130	OD1	ASP	1476	-15.412	6.015	24.179	1.00	43.75
	ATOM	131	OD2	ASP	1476	-17.003	6.558	25.563	1.00	45.77
	ATOM	132	C	ASP	1476	-12.922	6.292	25.701	1.00	35.86
	ATOM	133	O	ASP	1476	-12.923	5.928	26.878	1.00	37.98
30	ATOM	134	N	ARG	1477	-12.478	5.527	24.711	1.00	33.37
	ATOM	136	CA	ARG	1477	-11.889	4.221	24.961	1.00	31.84
	ATOM	137	CB	ARG	1477	-12.214	3.262	23.809	1.00	31.84
	ATOM	138	CG	ARG	1477	-13.693	2.965	23.580	1.00	29.70
	ATOM	139	CD	ARG	1477	-14.366	2.365	24.809	1.00	33.88
	ATOM	140	NE	ARG	1477	-14.596	3.372	25.838	1.00	33.86
	ATOM	142	CZ	ARG	1477	-14.845	3.102	27.113	1.00	34.14
	ATOM	143	NH1	ARG	1477	-14.906	1.846	27.542	1.00	30.58
	ATOM	146	NH2	ARG	1477	-15.024	4.102	27.961	1.00	33.14
35	ATOM	149	C	ARG	1477	-10.373	4.338	25.105	1.00	31.30
	ATOM	150	O	ARG	1477	-9.679	3.362	25.365	1.00	32.32
	ATOM	151	N	LEU	1478	-9.856	5.544	24.978	1.00	32.85
	ATOM	153	CA	LEU	1478	-8.426	5.739	25.054	1.00	35.64
	ATOM	154	CB	LEU	1478	-7.964	6.360	23.737	1.00	34.96

	ATOM	155	CG	LEU	1478	-6.498	6.291	23.331	1.00	36.36
	ATOM	156	CD1	LEU	1478	-6.059	4.833	23.192	1.00	30.71
	ATOM	157	CD2	LEU	1478	-6.335	7.048	22.020	1.00	33.97
	ATOM	158	C	LEU	1478	-8.054	6.625	26.243	1.00	37.60
	ATOM	159	O	LEU	1478	-8.366	7.815	26.263	1.00	41.20
	ATOM	160	N	VAL	1479	-7.442	6.023	27.257	1.00	36.52
	ATOM	162	CA	VAL	1479	-7.008	6.745	28.449	1.00	35.59
5	ATOM	163	CB	VAL	1479	-7.041	5.829	29.688	1.00	35.92
	ATOM	164	CG1	VAL	1479	-6.712	6.627	30.926	1.00	39.40
	ATOM	165	CG2	VAL	1479	-8.404	5.163	29.825	1.00	34.46
	ATOM	166	C	VAL	1479	-5.577	7.224	28.197	1.00	35.36
	ATOM	167	O	VAL	1479	-4.622	6.443	28.269	1.00	32.50
	ATOM	168	N	LEU	1480	-5.439	8.506	27.878	1.00	37.77
	ATOM	170	CA	LEU	1480	-4.132	9.086	27.572	1.00	42.77
	ATOM	171	CB	LEU	1480	-4.298	10.421	26.842	1.00	41.84
	ATOM	172	CG	LEU	1480	-4.991	10.369	25.471	1.00	42.45
10	ATOM	173	CD1	LEU	1480	-5.135	11.774	24.924	1.00	42.58
	ATOM	174	CD2	LEU	1480	-4.200	9.508	24.502	1.00	43.09
	ATOM	175	C	LEU	1480	-3.211	9.233	28.778	1.00	45.25
	ATOM	176	O	LEU	1480	-3.621	9.739	29.822	1.00	45.47
	ATOM	177	N	GLY	1481	-1.958	8.816	28.612	1.00	46.82
	ATOM	179	CA	GLY	1481	-1.016	8.889	29.708	1.00	50.47
	ATOM	180	C	GLY	1481	0.296	9.617	29.472	1.00	52.24
	ATOM	181	O	GLY	1481	0.360	10.638	28.781	1.00	53.41
	ATOM	182	N	LYS	1482	1.349	9.070	30.068	1.00	53.64
15	ATOM	184	CA	LYS	1482	2.697	9.627	30.000	1.00	56.19
	ATOM	185	CB	LYS	1482	3.636	8.776	30.859	1.00	57.19
	ATOM	186	CG	LYS	1482	5.115	9.023	30.628	1.00	61.02
	ATOM	187	CD	LYS	1482	5.938	7.831	31.089	1.00	63.12
	ATOM	188	CE	LYS	1482	5.494	6.547	30.395	1.00	61.98
	ATOM	189	NZ	LYS	1482	6.252	5.368	30.899	1.00	63.38
	ATOM	193	C	LYS	1482	3.297	9.795	28.604	1.00	56.56
	ATOM	194	O	LYS	1482	3.291	8.868	27.791	1.00	55.03
	ATOM	195	N	PRO	1483	3.852	10.983	28.323	1.00	58.31
20	ATOM	196	CD	PRO	1483	3.859	12.191	29.167	1.00	56.98
	ATOM	197	CA	PRO	1483	4.465	11.254	27.020	1.00	59.52
	ATOM	198	CB	PRO	1483	4.910	12.711	27.155	1.00	58.75
	ATOM	199	CG	PRO	1483	3.927	13.278	28.141	1.00	58.79
	ATOM	200	C	PRO	1483	5.673	10.335	26.834	1.00	61.17
	ATOM	201	O	PRO	1483	6.509	10.216	27.731	1.00	61.31
	ATOM	202	N	LEU	1484	5.728	9.643	25.702	1.00	64.31
	ATOM	204	CA	LEU	1484	6.838	8.738	25.408	1.00	67.77
	ATOM	205	CB	LEU	1484	6.349	7.512	24.640	1.00	67.66
25	ATOM	206	CG	LEU	1484	5.415	6.558	25.386	1.00	69.00
	ATOM	207	CD1	LEU	1484	4.943	5.457	24.445	1.00	66.76
	ATOM	208	CD2	LEU	1484	6.126	5.972	26.604	1.00	67.77
	ATOM	209	C	LEU	1484	7.934	9.431	24.608	1.00	70.82
	ATOM	210	O	LEU	1484	9.117	9.115	24.759	1.00	71.82
	ATOM	211	N	GLY	1485	7.534	10.357	23.742	1.00	73.28
	ATOM	213	CA	GLY	1485	8.492	11.077	22.922	1.00	74.53
	ATOM	214	C	GLY	1485	7.819	11.754	21.747	1.00	75.19
	ATOM	215	O	GLY	1485	6.635	12.090	21.822	1.00	75.61
30	ATOM	216	N	GLN	1491	4.406	14.274	18.638	1.00	50.72
	ATOM	218	CA	GLN	1491	4.042	13.876	19.994	1.00	47.33
	ATOM	219	CB	GLN	1491	3.033	14.869	20.587	1.00	46.67
	ATOM	220	C	GLN	1491	3.486	12.449	20.073	1.00	46.66
	ATOM	221	O	GLN	1491	2.581	12.074	19.323	1.00	45.20
	ATOM	222	N	VAL	1492	4.072	11.650	20.960	1.00	45.41
	ATOM	224	CA	VAL	1492	3.646	10.274	21.184	1.00	43.83
	ATOM	225	CB	VAL	1492	4.680	9.244	20.709	1.00	41.60
	ATOM	226	CG1	VAL	1492	4.138	7.849	20.937	1.00	41.35
35	ATOM	227	CG2	VAL	1492	5.007	9.445	19.237	1.00	42.72
	ATOM	228	C	VAL	1492	3.458	10.084	22.683	1.00	44.45
	ATOM	229	O	VAL	1492	4.335	10.437	23.482	1.00	43.86
	ATOM	230	N	VAL	1493	2.309	9.548	23.070	1.00	42.67
	ATOM	232	CA	VAL	1493	2.029	9.321	24.477	1.00	41.05

	ATOM	233	CB	VAL	1493	0.884	10.242	25.013	1.00	40.64
	ATOM	234	CG1	VAL	1493	1.177	11.693	24.722	1.00	42.40
	ATOM	235	CG2	VAL	1493	-0.459	9.844	24.427	1.00	43.36
	ATOM	236	C	VAL	1493	1.626	7.880	24.704	1.00	40.09
	ATOM	237	O	VAL	1493	1.129	7.212	23.796	1.00	39.99
	ATOM	238	N	LEU	1494	1.927	7.374	25.890	1.00	37.10
	ATOM	240	CA	LEU	1494	1.535	6.036	26.250	1.00	35.08
5	ATOM	241	CB	LEU	1494	2.359	5.542	27.440	1.00	35.57
	ATOM	242	CG	LEU	1494	2.036	4.161	28.007	1.00	36.87
	ATOM	243	CD1	LEU	1494	2.123	3.085	26.931	1.00	36.90
	ATOM	244	CD2	LEU	1494	2.998	3.860	29.143	1.00	41.99
	ATOM	245	C	LEU	1494	0.077	6.236	26.648	1.00	33.31
	ATOM	246	O	LEU	1494	-0.311	7.318	27.097	1.00	32.93
	ATOM	247	N	ALA	1495	-0.740	5.219	26.435	1.00	33.35
	ATOM	249	CA	ALA	1495	-2.147	5.292	26.773	1.00	30.67
	ATOM	250	CB	ALA	1495	-2.923	5.937	25.637	1.00	30.35
10	ATOM	251	C	ALA	1495	-2.661	3.893	27.025	1.00	29.97
	ATOM	252	O	ALA	1495	-1.944	2.909	26.840	1.00	28.15
	ATOM	253	N	GLU	1496	-3.898	3.813	27.488	1.00	30.37
	ATOM	255	CA	GLU	1496	-4.537	2.536	27.745	1.00	31.47
	ATOM	256	CB	GLU	1496	-4.862	2.392	29.223	1.00	32.48
	ATOM	257	CG	GLU	1496	-3.627	2.239	30.093	1.00	37.81
	ATOM	258	CD	GLU	1496	-3.938	2.426	31.565	1.00	41.09
	ATOM	259	OE1	GLU	1496	-4.328	3.548	31.944	1.00	41.53
	ATOM	260	OE2	GLU	1496	-3.797	1.453	32.341	1.00	44.12
15	ATOM	261	C	GLU	1496	-5.806	2.524	26.916	1.00	32.72
	ATOM	262	O	GLU	1496	-6.586	3.478	26.954	1.00	33.91
	ATOM	263	N	ALA	1497	-5.953	1.494	26.094	1.00	31.06
	ATOM	265	CA	ALA	1497	-7.117	1.353	25.239	1.00	32.33
	ATOM	266	CB	ALA	1497	-6.691	0.879	23.859	1.00	29.56
	ATOM	267	C	ALA	1497	-8.056	0.343	25.885	1.00	32.26
	ATOM	268	O	ALA	1497	-7.648	-0.773	26.197	1.00	33.55
	ATOM	269	N	ILE	1498	-9.286	0.759	26.160	1.00	32.99
	ATOM	271	CA	ILE	1498	-10.276	-0.126	26.766	1.00	34.00
20	ATOM	272	CB	ILE	1498	-11.329	0.668	27.592	1.00	34.69
	ATOM	273	CG2	ILE	1498	-12.341	-0.288	28.240	1.00	34.24
	ATOM	274	CG1	ILE	1498	-10.647	1.496	28.686	1.00	33.56
	ATOM	275	CD1	ILE	1498	-11.543	2.572	29.258	1.00	31.25
	ATOM	276	C	ILE	1498	-10.994	-0.830	25.624	1.00	35.71
	ATOM	277	O	ILE	1498	-11.618	-0.181	24.786	1.00	34.88
	ATOM	278	N	GLY	1499	-10.890	-2.147	25.573	1.00	40.43
	ATOM	280	CA	GLY	1499	-11.553	-2.884	24.516	1.00	47.63
	ATOM	281	C	GLY	1499	-10.670	-3.233	23.330	1.00	53.08
25	ATOM	282	O	GLY	1499	-9.934	-4.226	23.380	1.00	54.97
	ATOM	283	N	LEU	1500	-10.713	-2.394	22.294	1.00	54.18
	ATOM	285	CA	LEU	1500	-9.957	-2.603	21.055	1.00	55.26
	ATOM	286	CB	LEU	1500	-8.444	-2.726	21.305	1.00	55.39
	ATOM	287	CG	LEU	1500	-7.562	-1.472	21.241	1.00	54.27
	ATOM	288	CD1	LEU	1500	-6.110	-1.891	21.367	1.00	52.89
	ATOM	289	CD2	LEU	1500	-7.768	-0.711	19.935	1.00	50.91
	ATOM	290	C	LEU	1500	-10.453	-3.830	20.288	1.00	55.39
	ATOM	291	O	LEU	1500	-10.376	-4.963	20.774	1.00	56.23
30	ATOM	292	N	PRO	1505	-13.315	-5.836	25.394	1.00	53.03
	ATOM	293	CD	PRO	1505	-13.945	-7.148	25.167	1.00	55.12
	ATOM	294	CA	PRO	1505	-14.306	-4.848	25.846	1.00	50.62
	ATOM	295	CB	PRO	1505	-15.635	-5.607	25.715	1.00	50.09
	ATOM	296	CG	PRO	1505	-15.241	-7.031	25.950	1.00	52.18
	ATOM	297	C	PRO	1505	-14.039	-4.348	27.273	1.00	46.35
	ATOM	298	O	PRO	1505	-14.065	-3.143	27.524	1.00	45.82
	ATOM	299	N	ASN	1506	-13.711	-5.261	28.181	1.00	42.76
	ATOM	301	CA	ASN	1506	-13.433	-4.892	29.566	1.00	45.29
35	ATOM	302	CB	ASN	1506	-14.283	-5.728	30.529	1.00	45.92
	ATOM	303	CG	ASN	1506	-15.752	-5.395	30.441	1.00	46.17
	ATOM	304	OD1	ASN	1506	-16.132	-4.232	30.390	1.00	48.57
	ATOM	305	ND2	ASN	1506	-16.589	-6.418	30.406	1.00	48.63
	ATOM	308	C	ASN	1506	-11.954	-5.008	29.939	1.00	45.33

	ATOM	309	O	ASN	1506	-11.597	-5.084	31.121	1.00	44.53
	ATOM	310	N	ARG	1507	-11.100	-5.010	28.924	1.00	45.63
	ATOM	312	CA	ARG	1507	-9.660	-5.122	29.117	1.00	45.57
	ATOM	313	CB	ARG	1507	-9.131	-6.354	28.375	1.00	53.33
	ATOM	314	CG	ARG	1507	-9.407	-7.685	29.043	1.00	61.39
	ATOM	315	CD	ARG	1507	-8.336	-8.028	30.063	1.00	67.74
	ATOM	316	NE	ARG	1507	-8.525	-9.376	30.585	1.00	74.64
5	ATOM	318	CZ	ARG	1507	-7.970	-9.842	31.701	1.00	80.01
	ATOM	319	NH1	ARG	1507	-7.166	-9.075	32.433	1.00	80.04
	ATOM	322	NH2	ARG	1507	-8.268	-11.068	32.115	1.00	83.41
	ATOM	325	C	ARG	1507	-8.964	-3.897	28.555	1.00	40.94
	ATOM	326	O	ARG	1507	-9.370	-3.375	27.517	1.00	37.60
	ATOM	327	N	VAL	1508	-7.956	-3.409	29.267	1.00	39.33
	ATOM	329	CA	VAL	1508	-7.190	-2.269	28.789	1.00	37.26
	ATOM	330	CB	VAL	1508	-6.854	-1.224	29.905	1.00	36.25
	ATOM	331	CG1	VAL	1508	-8.124	-0.739	30.571	1.00	39.63
10	ATOM	332	CG2	VAL	1508	-5.903	-1.796	30.928	1.00	36.92
	ATOM	333	C	VAL	1508	-5.898	-2.818	28.188	1.00	34.38
	ATOM	334	O	VAL	1508	-5.387	-3.851	28.630	1.00	32.85
	ATOM	335	N	THR	1509	-5.406	-2.140	27.159	1.00	30.47
	ATOM	337	CA	THR	1509	-4.174	-2.523	26.491	1.00	31.65
	ATOM	338	CB	THR	1509	-4.455	-2.959	25.027	1.00	34.13
	ATOM	339	OG1	THR	1509	-5.426	-4.013	25.018	1.00	40.74
	ATOM	341	CG2	THR	1509	-3.184	-3.458	24.345	1.00	31.06
	ATOM	342	C	THR	1509	-3.270	-1.299	26.461	1.00	28.38
15	ATOM	343	O	THR	1509	-3.716	-0.219	26.104	1.00	27.78
	ATOM	344	N	LYS	1510	-2.023	-1.442	26.896	1.00	29.48
	ATOM	346	CA	LYS	1510	-1.101	-0.312	26.835	1.00	30.54
	ATOM	347	CB	LYS	1510	0.172	-0.558	27.635	1.00	27.88
	ATOM	348	CG	LYS	1510	-0.037	-0.600	29.118	1.00	33.91
	ATOM	349	CD	LYS	1510	1.284	-0.759	29.840	1.00	40.30
	ATOM	350	CE	LYS	1510	1.145	-1.674	31.062	1.00	46.24
	ATOM	351	NZ	LYS	1510	0.338	-1.096	32.187	1.00	49.09
	ATOM	355	C	LYS	1510	-0.757	-0.166	25.365	1.00	28.64
20	ATOM	356	O	LYS	1510	-0.402	-1.142	24.704	1.00	28.76
	ATOM	357	N	VAL	1511	-0.902	1.048	24.856	1.00	29.34
	ATOM	359	CA	VAL	1511	-0.627	1.347	23.463	1.00	29.79
	ATOM	360	CB	VAL	1511	-1.951	1.457	22.658	1.00	27.14
	ATOM	361	CG1	VAL	1511	-2.681	0.111	22.657	1.00	24.56
	ATOM	362	CG2	VAL	1511	-2.837	2.561	23.243	1.00	22.15
	ATOM	363	C	VAL	1511	0.123	2.672	23.361	1.00	29.83
	ATOM	364	O	VAL	1511	0.213	3.413	24.338	1.00	33.14
	ATOM	365	N	ALA	1512	0.705	2.939	22.196	1.00	27.86
25	ATOM	367	CA	ALA	1512	1.405	4.192	21.962	1.00	25.55
	ATOM	368	CB	ALA	1512	2.743	3.935	21.297	1.00	24.69
	ATOM	369	C	ALA	1512	0.500	5.009	21.057	1.00	25.25
	ATOM	370	O	ALA	1512	-0.061	4.483	20.107	1.00	27.18
	ATOM	371	N	VAL	1513	0.340	6.289	21.360	1.00	29.63
	ATOM	373	CA	VAL	1513	-0.520	7.165	20.573	1.00	32.66
	ATOM	374	CB	VAL	1513	-1.704	7.713	21.422	1.00	32.47
	ATOM	375	CG1	VAL	1513	-2.609	8.585	20.574	1.00	32.29
	ATOM	376	CG2	VAL	1513	-2.508	6.559	22.031	1.00	32.15
30	ATOM	377	C	VAL	1513	0.238	8.334	19.938	1.00	34.67
	ATOM	378	O	VAL	1513	0.792	9.185	20.635	1.00	34.65
	ATOM	379	N	LYS	1514	0.207	8.367	18.605	1.00	36.88
	ATOM	381	CA	LYS	1514	0.859	9.390	17.789	1.00	36.43
	ATOM	382	CB	LYS	1514	1.349	8.764	16.489	1.00	36.37
	ATOM	383	CG	LYS	1514	2.250	7.563	16.697	1.00	39.49
	ATOM	384	CD	LYS	1514	2.559	6.854	15.390	1.00	45.29
	ATOM	385	CE	LYS	1514	3.080	7.815	14.331	1.00	50.70
	ATOM	386	NZ	LYS	1514	4.212	8.685	14.798	1.00	51.41
35	ATOM	390	C	LYS	1514	-0.121	10.496	17.459	1.00	36.75
	ATOM	391	O	LYS	1514	-1.228	10.234	16.978	1.00	35.42
	ATOM	392	N	MET	1515	0.294	11.731	17.700	1.00	38.12
	ATOM	394	CA	MET	1515	-0.545	12.882	17.432	1.00	41.90
	ATOM	395	CB	MET	1515	-1.371	13.238	18.668	1.00	43.08

	ATOM	396	CG	MET	1515	-0.536	13.601	19.880	1.00	45.01
	ATOM	397	SD	MET	1515	-1.561	13.784	21.324	1.00	46.03
	ATOM	398	CE	MET	1515	-1.675	12.072	21.885	1.00	44.02
	ATOM	399	C	MET	1515	0.314	14.065	17.021	1.00	44.65
	ATOM	400	O	MET	1515	1.543	14.013	17.094	1.00	45.64
	ATOM	401	N	LEU	1516	-0.347	15.123	16.568	1.00	47.08
	ATOM	403	CA	LEU	1516	0.329	16.337	16.134	1.00	48.08
5	ATOM	404	CB	LEU	1516	-0.500	17.033	15.054	1.00	45.50
	ATOM	405	CG	LEU	1516	-0.764	16.265	13.764	1.00	43.22
	ATOM	406	CD1	LEU	1516	-1.783	17.014	12.946	1.00	40.32
	ATOM	407	CD2	LEU	1516	0.540	16.072	12.991	1.00	43.78
	ATOM	408	C	LEU	1516	0.516	17.302	17.297	1.00	51.27
	ATOM	409	O	LEU	1516	-0.214	17.249	18.291	1.00	50.37
	ATOM	410	N	LYS	1517	1.491	18.191	17.157	1.00	55.47
	ATOM	412	CA	LYS	1517	1.757	19.207	18.168	1.00	59.10
	ATOM	413	CB	LYS	1517	3.203	19.702	18.068	1.00	61.61
10	ATOM	414	CG	LYS	1517	4.251	18.669	18.462	1.00	64.82
	ATOM	415	CD	LYS	1517	5.635	19.109	18.018	1.00	67.42
	ATOM	416	CE	LYS	1517	6.696	18.102	18.432	1.00	71.76
	ATOM	417	NZ	LYS	1517	8.021	18.411	17.812	1.00	73.57
	ATOM	421	C	LYS	1517	0.794	20.365	17.920	1.00	59.91
	ATOM	422	O	LYS	1517	0.187	20.456	16.852	1.00	59.88
	ATOM	423	N	SER	1518	0.686	21.267	18.886	1.00	61.85
	ATOM	425	CA	SER	1518	-0.216	22.409	18.760	1.00	63.70
	ATOM	426	CB	SER	1518	-0.158	23.274	20.024	1.00	64.21
15	ATOM	427	C	SER	1518	0.079	23.263	17.529	1.00	64.37
	ATOM	428	O	SER	1518	-0.841	23.757	16.875	1.00	66.16
	ATOM	429	N	ASP	1519	1.359	23.410	17.202	1.00	64.15
	ATOM	431	CA	ASP	1519	1.767	24.217	16.054	1.00	64.55
	ATOM	432	CB	ASP	1519	3.109	24.897	16.343	1.00	65.84
	ATOM	433	C	ASP	1519	1.858	23.441	14.742	1.00	63.95
	ATOM	434	O	ASP	1519	2.432	23.931	13.769	1.00	64.95
	ATOM	435	N	ALA	1520	1.303	22.232	14.719	1.00	62.57
	ATOM	437	CA	ALA	1520	1.329	21.398	13.521	1.00	60.34
20	ATOM	438	CB	ALA	1520	0.704	20.039	13.810	1.00	60.53
	ATOM	439	C	ALA	1520	0.616	22.062	12.353	1.00	58.21
	ATOM	440	O	ALA	1520	-0.464	22.631	12.506	1.00	58.32
	ATOM	441	N	THR	1521	1.241	22.001	11.186	1.00	55.96
	ATOM	443	CA	THR	1521	0.673	22.582	9.981	1.00	54.98
	ATOM	444	CB	THR	1521	1.783	23.013	9.031	1.00	53.84
	ATOM	445	OG1	THR	1521	2.554	21.862	8.659	1.00	55.84
	ATOM	447	CG2	THR	1521	2.693	24.026	9.703	1.00	55.01
	ATOM	448	C	THR	1521	-0.184	21.545	9.261	1.00	54.25
25	ATOM	449	O	THR	1521	-0.190	20.371	9.629	1.00	54.74
	ATOM	450	N	GLU	1522	-0.877	21.974	8.212	1.00	53.32
	ATOM	452	CA	GLU	1522	-1.702	21.066	7.423	1.00	52.64
	ATOM	453	CB	GLU	1522	-2.472	21.829	6.339	1.00	53.55
	ATOM	454	C	GLU	1522	-0.793	20.012	6.780	1.00	51.95
	ATOM	455	O	GLU	1522	-1.226	18.895	6.504	1.00	53.28
	ATOM	456	N	LYS	1523	0.464	20.377	6.544	1.00	48.66
	ATOM	458	CA	LYS	1523	1.429	19.460	5.963	1.00	46.30
	ATOM	459	CB	LYS	1523	2.730	20.201	5.620	1.00	48.30
30	ATOM	460	CG	LYS	1523	3.889	19.308	5.164	1.00	49.58
	ATOM	461	CD	LYS	1523	3.487	18.388	4.016	1.00	50.87
	ATOM	462	CE	LYS	1523	4.688	17.635	3.466	1.00	54.08
	ATOM	463	NZ	LYS	1523	4.271	16.629	2.440	1.00	57.87
	ATOM	467	C	LYS	1523	1.699	18.391	7.006	1.00	43.89
	ATOM	468	O	LYS	1523	1.747	17.202	6.697	1.00	43.92
	ATOM	469	N	ASP	1524	1.857	18.828	8.249	1.00	42.71
	ATOM	471	CA	ASP	1524	2.114	17.915	9.351	1.00	42.11
	ATOM	472	CB	ASP	1524	2.313	18.701	10.653	1.00	44.94
35	ATOM	473	CG	ASP	1524	3.623	19.490	10.673	1.00	48.90
	ATOM	474	OD1	ASP	1524	3.692	20.512	11.392	1.00	51.88
	ATOM	475	OD2	ASP	1524	4.590	19.084	9.990	1.00	50.06
	ATOM	476	C	ASP	1524	0.956	16.931	9.481	1.00	39.85
	ATOM	477	O	ASP	1524	1.164	15.738	9.748	1.00	39.01

	ATOM	478	N	LEU	1525	-0.261	17.438	9.296	1.00	38.32
	ATOM	480	CA	LEU	1525	-1.461	16.610	9.355	1.00	36.16
	ATOM	481	CB	LEU	1525	-2.720	17.470	9.200	1.00	35.13
	ATOM	482	CG	LEU	1525	-4.081	16.760	9.186	1.00	34.70
	ATOM	483	CD1	LEU	1525	-4.184	15.668	10.252	1.00	36.15
	ATOM	484	CD2	LEU	1525	-5.162	17.789	9.395	1.00	32.96
	ATOM	485	C	LEU	1525	-1.406	15.560	8.254	1.00	34.31
5	ATOM	486	O	LEU	1525	-1.575	14.377	8.518	1.00	33.34
	ATOM	487	N	SER	1526	-1.136	16.005	7.030	1.00	36.40
	ATOM	489	CA	SER	1526	-1.039	15.128	5.865	1.00	37.16
	ATOM	490	CB	SER	1526	-0.669	15.931	4.618	1.00	38.84
	ATOM	491	OG	SER	1526	-1.736	16.779	4.245	1.00	49.61
	ATOM	493	C	SER	1526	-0.021	14.016	6.044	1.00	35.90
	ATOM	494	O	SER	1526	-0.273	12.873	5.670	1.00	36.68
	ATOM	495	N	ASP	1527	1.142	14.349	6.591	1.00	35.89
	ATOM	497	CA	ASP	1527	2.177	13.342	6.796	1.00	35.25
10	ATOM	498	CB	ASP	1527	3.497	13.998	7.201	1.00	35.58
	ATOM	499	CG	ASP	1527	4.100	14.850	6.081	1.00	37.19
	ATOM	500	OD1	ASP	1527	3.750	14.653	4.895	1.00	37.38
	ATOM	501	OD2	ASP	1527	4.932	15.726	6.395	1.00	42.93
	ATOM	502	C	ASP	1527	1.749	12.274	7.799	1.00	31.77
	ATOM	503	O	ASP	1527	2.000	11.090	7.594	1.00	30.58
	ATOM	504	N	LEU	1528	1.055	12.684	8.853	1.00	31.80
	ATOM	506	CA	LEU	1528	0.581	11.730	9.857	1.00	33.53
	ATOM	507	CB	LEU	1528	-0.002	12.471	11.076	1.00	32.20
15	ATOM	508	CG	LEU	1528	-0.440	11.623	12.275	1.00	32.63
	ATOM	509	CD1	LEU	1528	0.705	10.708	12.709	1.00	33.09
	ATOM	510	CD2	LEU	1528	-0.891	12.512	13.426	1.00	31.52
	ATOM	511	C	LEU	1528	-0.468	10.792	9.235	1.00	32.89
	ATOM	512	O	LEU	1528	-0.494	9.589	9.521	1.00	32.39
	ATOM	513	N	ILE	1529	-1.336	11.357	8.393	1.00	33.72
	ATOM	515	CA	ILE	1529	-2.376	10.591	7.711	1.00	30.48
	ATOM	516	CB	ILE	1529	-3.336	11.505	6.895	1.00	28.85
	ATOM	517	CG2	ILE	1529	-4.229	10.662	5.997	1.00	28.54
20	ATOM	518	CG1	ILE	1529	-4.200	12.344	7.843	1.00	29.52
	ATOM	519	CD1	ILE	1529	-5.143	13.308	7.133	1.00	32.07
	ATOM	520	C	ILE	1529	-1.698	9.608	6.768	1.00	31.50
	ATOM	521	O	ILE	1529	-2.009	8.419	6.780	1.00	30.75
	ATOM	522	N	SER	1530	-0.749	10.100	5.974	1.00	33.28
	ATOM	524	CA	SER	1530	-0.011	9.250	5.038	1.00	32.48
	ATOM	525	CB	SER	1530	1.114	10.042	4.368	1.00	37.20
	ATOM	526	OG	SER	1530	0.604	11.218	3.766	1.00	49.93
	ATOM	528	C	SER	1530	0.583	8.045	5.756	1.00	29.05
25	ATOM	529	O	SER	1530	0.397	6.909	5.316	1.00	28.66
	ATOM	530	N	GLU	1531	1.259	8.290	6.878	1.00	28.21
	ATOM	532	CA	GLU	1531	1.880	7.207	7.631	1.00	27.30
	ATOM	533	CB	GLU	1531	2.656	7.733	8.839	1.00	28.90
	ATOM	534	CG	GLU	1531	3.271	6.609	9.672	1.00	27.17
	ATOM	535	CD	GLU	1531	4.047	7.081	10.886	1.00	30.07
	ATOM	536	OE1	GLU	1531	4.779	6.244	11.448	1.00	34.78
	ATOM	537	OE2	GLU	1531	3.931	8.256	11.291	1.00	31.96
	ATOM	538	C	GLU	1531	0.870	6.162	8.072	1.00	27.73
30	ATOM	539	O	GLU	1531	1.160	4.961	8.028	1.00	28.72
	ATOM	540	N	MET	1532	-0.286	6.621	8.555	1.00	29.78
	ATOM	542	CA	MET	1532	-1.373	5.734	8.990	1.00	28.79
	ATOM	543	CB	MET	1532	-2.501	6.553	9.646	1.00	28.90
	ATOM	544	CG	MET	1532	-3.763	5.741	9.993	1.00	29.73
	ATOM	545	SD	MET	1532	-5.089	6.693	10.765	1.00	30.19
	ATOM	546	CE	MET	1532	-5.455	7.870	9.494	1.00	26.70
	ATOM	547	C	MET	1532	-1.935	4.937	7.796	1.00	28.34
	ATOM	548	O	MET	1532	-2.166	3.730	7.893	1.00	26.62
35	ATOM	549	N	GLU	1533	-2.165	5.624	6.678	1.00	28.85
	ATOM	551	CA	GLU	1533	-2.684	4.984	5.467	1.00	28.24
	ATOM	552	CB	GLU	1533	-2.936	6.027	4.384	1.00	25.42
	ATOM	553	CG	GLU	1533	-4.099	6.956	4.719	1.00	30.05
	ATOM	554	CD	GLU	1533	-5.393	6.201	5.021	1.00	29.47

	ATOM	555	OE1	GLU	1533	-5.794	5.336	4.211	1.00	29.01
	ATOM	556	OE2	GLU	1533	-6.011	6.472	6.073	1.00	33.98
	ATOM	557	C	GLU	1533	-1.694	3.944	4.968	1.00	28.01
	ATOM	558	O	GLU	1533	-2.072	2.845	4.573	1.00	27.39
	ATOM	559	N	MET	1534	-0.416	4.293	5.036	1.00	29.06
	ATOM	561	CA	MET	1534	0.662	3.413	4.621	1.00	29.74
	ATOM	562	CB	MET	1534	1.992	4.155	4.755	1.00	33.16
5	ATOM	563	CG	MET	1534	3.198	3.270	4.682	1.00	42.88
	ATOM	564	SD	MET	1534	3.805	3.127	3.042	1.00	50.20
	ATOM	565	CE	MET	1534	5.137	4.169	3.159	1.00	42.64
	ATOM	566	C	MET	1534	0.641	2.156	5.493	1.00	26.90
	ATOM	567	O	MET	1534	0.755	1.038	4.990	1.00	27.05
	ATOM	568	N	MET	1535	0.512	2.348	6.803	1.00	25.42
	ATOM	570	CA	MET	1535	0.437	1.233	7.737	1.00	25.88
	ATOM	571	CB	MET	1535	0.325	1.741	9.181	1.00	27.63
	ATOM	572	CG	MET	1535	1.607	2.391	9.737	1.00	27.26
10	ATOM	573	SD	MET	1535	1.584	2.561	11.564	1.00	29.49
	ATOM	574	CE	MET	1535	1.294	4.255	11.699	1.00	28.22
	ATOM	575	C	MET	1535	-0.754	0.324	7.396	1.00	26.28
	ATOM	576	O	MET	1535	-0.645	-0.908	7.469	1.00	25.93
	ATOM	577	N	LYS	1536	-1.890	0.928	7.032	1.00	27.19
	ATOM	579	CA	LYS	1536	-3.087	0.162	6.647	1.00	27.20
	ATOM	580	CB	LYS	1536	-4.257	1.088	6.310	1.00	25.29
	ATOM	581	CG	LYS	1536	-4.897	1.770	7.491	1.00	23.86
	ATOM	582	CD	LYS	1536	-5.884	2.820	7.017	1.00	22.16
15	ATOM	583	CE	LYS	1536	-6.460	3.588	8.174	1.00	22.25
	ATOM	584	NZ	LYS	1536	-7.484	4.541	7.713	1.00	23.40
	ATOM	588	C	LYS	1536	-2.785	-0.699	5.423	1.00	24.52
	ATOM	589	O	LYS	1536	-3.069	-1.889	5.403	1.00	26.61
	ATOM	590	N	MET	1537	-2.183	-0.093	4.411	1.00	27.12
	ATOM	592	CA	MET	1537	-1.843	-0.815	3.194	1.00	28.06
	ATOM	593	CB	MET	1537	-1.269	0.147	2.147	1.00	30.36
	ATOM	594	CG	MET	1537	-2.265	1.164	1.591	1.00	36.31
	ATOM	595	SD	MET	1537	-3.699	0.444	0.727	1.00	42.19
20	ATOM	596	CE	MET	1537	-2.912	-0.057	-0.793	1.00	36.22
	ATOM	597	C	MET	1537	-0.857	-1.952	3.447	1.00	26.98
	ATOM	598	O	MET	1537	-1.060	-3.065	2.963	1.00	25.34
	ATOM	599	N	ILE	1538	0.188	-1.678	4.229	1.00	27.69
	ATOM	601	CA	ILE	1538	1.234	-2.674	4.535	1.00	25.39
	ATOM	602	CB	ILE	1538	2.454	-2.006	5.255	1.00	24.42
	ATOM	603	CG2	ILE	1538	3.424	-3.051	5.811	1.00	25.28
	ATOM	604	CG1	ILE	1538	3.223	-1.131	4.269	1.00	23.88
	ATOM	605	CD1	ILE	1538	4.373	-0.372	4.901	1.00	27.19
25	ATOM	606	C	ILE	1538	0.760	-3.922	5.292	1.00	25.59
	ATOM	607	O	ILE	1538	1.242	-5.033	5.035	1.00	26.11
	ATOM	608	N	GLY	1539	-0.193	-3.767	6.208	1.00	26.13
	ATOM	610	CA	GLY	1539	-0.661	-4.940	6.934	1.00	25.25
	ATOM	611	C	GLY	1539	0.191	-5.280	8.149	1.00	26.77
	ATOM	612	O	GLY	1539	1.214	-4.637	8.414	1.00	25.42
	ATOM	613	N	LYS	1540	-0.204	-6.327	8.862	1.00	25.62
	ATOM	615	CA	LYS	1540	0.467	-6.716	10.092	1.00	26.38
	ATOM	616	CB	LYS	1540	-0.552	-7.283	11.084	1.00	27.15
30	ATOM	617	CG	LYS	1540	-1.573	-6.303	11.550	1.00	34.23
	ATOM	618	CD	LYS	1540	-2.528	-6.943	12.546	1.00	40.69
	ATOM	619	CE	LYS	1540	-3.559	-5.927	13.057	1.00	44.08
	ATOM	620	NZ	LYS	1540	-2.956	-4.800	13.833	1.00	44.05
	ATOM	624	C	LYS	1540	1.609	-7.705	10.014	1.00	24.37
	ATOM	625	O	LYS	1540	1.627	-8.600	9.181	1.00	26.12
	ATOM	626	N	HIS	1541	2.545	-7.538	10.936	1.00	24.41
	ATOM	628	CA	HIS	1541	3.666	-8.440	11.091	1.00	25.41
	ATOM	629	CB	HIS	1541	4.772	-8.228	10.057	1.00	21.88
35	ATOM	630	CG	HIS	1541	5.798	-9.320	10.068	1.00	22.68
	ATOM	631	CD2	HIS	1541	5.823	-10.522	9.444	1.00	21.40
	ATOM	632	ND1	HIS	1541	6.939	-9.268	10.843	1.00	22.12
	ATOM	634	CE1	HIS	1541	7.619	-10.389	10.697	1.00	24.78
	ATOM	635	NE2	HIS	1541	6.966	-11.167	9.854	1.00	27.00

	ATOM	637	C	HIS	1541	4.234	-8.328	12.494	1.00	25.47
	ATOM	638	O	HIS	1541	4.364	-7.239	13.050	1.00	26.77
	ATOM	639	N	LYS	1542	4.560	-9.476	13.063	1.00	26.38
	ATOM	641	CA	LYS	1542	5.127	-9.552	14.401	1.00	30.07
	ATOM	642	CB	LYS	1542	5.515	-11.003	14.692	1.00	31.38
	ATOM	643	CG	LYS	1542	6.061	-11.252	16.077	1.00	42.79
	ATOM	644	CD	LYS	1542	6.289	-12.735	16.294	1.00	50.84
5	ATOM	645	CE	LYS	1542	7.041	-13.374	15.114	1.00	56.75
	ATOM	646	NZ	LYS	1542	7.511	-14.763	15.424	1.00	61.29
	ATOM	650	C	LYS	1542	6.342	-8.652	14.624	1.00	27.65
	ATOM	651	O	LYS	1542	6.519	-8.113	15.711	1.00	26.83
	ATOM	652	N	ASN	1543	7.146	-8.445	13.585	1.00	27.20
	ATOM	654	CA	ASN	1543	8.354	-7.642	13.735	1.00	25.50
	ATOM	655	CB	ASN	1543	9.578	-8.431	13.260	1.00	25.59
	ATOM	656	CG	ASN	1543	9.712	-9.767	13.974	1.00	22.64
	ATOM	657	OD1	ASN	1543	9.522	-10.821	13.371	1.00	26.76
10	ATOM	658	ND2	ASN	1543	9.970	-9.727	15.273	1.00	25.56
	ATOM	661	C	ASN	1543	8.374	-6.213	13.226	1.00	25.48
	ATOM	662	O	ASN	1543	9.417	-5.692	12.842	1.00	24.58
	ATOM	663	N	ILE	1544	7.209	-5.575	13.244	1.00	24.60
	ATOM	665	CA	ILE	1544	7.065	-4.177	12.868	1.00	22.32
	ATOM	666	CB	ILE	1544	6.524	-3.972	11.409	1.00	25.82
	ATOM	667	CG2	ILE	1544	7.401	-4.720	10.403	1.00	24.24
	ATOM	668	CG1	ILE	1544	5.057	-4.411	11.279	1.00	26.04
	ATOM	669	CD1	ILE	1544	4.446	-4.121	9.901	1.00	23.20
15	ATOM	670	C	ILE	1544	6.075	-3.598	13.881	1.00	22.37
	ATOM	671	O	ILE	1544	5.364	-4.345	14.559	1.00	21.68
	ATOM	672	N	ILE	1545	6.111	-2.290	14.076	1.00	23.72
	ATOM	674	CA	ILE	1545	5.169	-1.650	14.989	1.00	25.92
	ATOM	675	CB	ILE	1545	5.602	-0.199	15.364	1.00	27.24
	ATOM	676	CG2	ILE	1545	4.452	0.554	16.035	1.00	22.76
	ATOM	677	CG1	ILE	1545	6.839	-0.219	16.285	1.00	25.57
	ATOM	678	CD1	ILE	1545	6.591	-0.797	17.686	1.00	24.66
	ATOM	679	C	ILE	1545	3.877	-1.612	14.179	1.00	26.03
20	ATOM	680	O	ILE	1545	3.823	-0.988	13.122	1.00	25.70
	ATOM	681	N	ASN	1546	2.849	-2.293	14.669	1.00	24.79
	ATOM	683	CA	ASN	1546	1.577	-2.354	13.956	1.00	25.51
	ATOM	684	CB	ASN	1546	0.922	-3.727	14.137	1.00	25.17
	ATOM	685	CG	ASN	1546	1.730	-4.839	13.539	1.00	21.67
	ATOM	686	OD1	ASN	1546	1.856	-4.947	12.329	1.00	24.29
	ATOM	687	ND2	ASN	1546	2.278	-5.686	14.384	1.00	22.24
	ATOM	690	C	ASN	1546	0.578	-1.276	14.349	1.00	26.85
	ATOM	691	O	ASN	1546	0.630	-0.724	15.453	1.00	28.67
25	ATOM	692	N	LEU	1547	-0.301	-0.956	13.407	1.00	27.70
	ATOM	694	CA	LEU	1547	-1.357	0.019	13.622	1.00	27.64
	ATOM	695	CB	LEU	1547	-1.945	0.481	12.284	1.00	24.87
	ATOM	696	CG	LEU	1547	-3.173	1.400	12.337	1.00	23.25
	ATOM	697	CD1	LEU	1547	-2.790	2.763	12.929	1.00	23.76
	ATOM	698	CD2	LEU	1547	-3.757	1.569	10.923	1.00	23.47
	ATOM	699	C	LEU	1547	-2.415	-0.771	14.396	1.00	27.27
	ATOM	700	O	LEU	1547	-2.663	-1.952	14.103	1.00	25.27
	ATOM	701	N	LEU	1548	-3.000	-0.130	15.400	1.00	27.94
30	ATOM	703	CA	LEU	1548	-4.017	-0.770	16.223	1.00	26.98
	ATOM	704	CB	LEU	1548	-3.623	-0.735	17.708	1.00	24.65
	ATOM	705	CG	LEU	1548	-2.327	-1.450	18.108	1.00	25.38
	ATOM	706	CD1	LEU	1548	-2.189	-1.428	19.613	1.00	25.73
	ATOM	707	CD2	LEU	1548	-2.337	-2.886	17.621	1.00	23.92
	ATOM	708	C	LEU	1548	-5.369	-0.113	16.042	1.00	26.65
	ATOM	709	O	LEU	1548	-6.392	-0.752	16.238	1.00	27.11
	ATOM	710	N	GLY	1549	-5.378	1.163	15.684	1.00	25.04
	ATOM	712	CA	GLY	1549	-6.643	1.855	15.516	1.00	25.47
35	ATOM	713	C	GLY	1549	-6.417	3.336	15.367	1.00	26.23
	ATOM	714	O	GLY	1549	-5.267	3.781	15.287	1.00	28.41
	ATOM	715	N	ALA	1550	-7.501	4.104	15.349	1.00	25.49
	ATOM	717	CA	ALA	1550	-7.408	5.550	15.198	1.00	24.81
	ATOM	718	CB	ALA	1550	-7.176	5.913	13.724	1.00	21.79

	ATOM	719	C	ALA	1550	-8.645	6.271	15.691	1.00	25.51
	ATOM	720	O	ALA	1550	-9.738	5.702	15.726	1.00	24.09
	ATOM	721	N	CYS	1551	-8.440	7.527	16.080	1.00	24.90
	ATOM	723	CA	CYS	1551	-9.492	8.438	16.511	1.00	26.80
	ATOM	724	CB	CYS	1551	-9.243	8.932	17.944	1.00	26.32
	ATOM	725	SG	CYS	1551	-9.333	7.655	19.223	1.00	32.31
	ATOM	726	C	CYS	1551	-9.341	9.585	15.502	1.00	28.31
5	ATOM	727	O	CYS	1551	-8.361	10.338	15.537	1.00	28.42
	ATOM	728	N	THR	1552	-10.261	9.660	14.547	1.00	28.38
	ATOM	730	CA	THR	1552	-10.198	10.671	13.498	1.00	31.26
	ATOM	731	CB	THR	1552	-10.159	9.977	12.095	1.00	30.07
	ATOM	732	OG1	THR	1552	-11.406	9.309	11.836	1.00	29.64
	ATOM	734	CG2	THR	1552	-9.044	8.945	12.053	1.00	28.65
	ATOM	735	C	THR	1552	-11.355	11.662	13.509	1.00	33.31
	ATOM	736	O	THR	1552	-11.295	12.722	12.874	1.00	31.94
	ATOM	737	N	GLN	1553	-12.420	11.309	14.214	1.00	36.09
10	ATOM	739	CA	GLN	1553	-13.598	12.158	14.245	1.00	39.26
	ATOM	740	CB	GLN	1553	-14.864	11.299	14.145	1.00	36.61
	ATOM	741	CG	GLN	1553	-14.932	10.436	12.881	1.00	37.72
	ATOM	742	CD	GLN	1553	-14.762	11.247	11.601	1.00	38.41
	ATOM	743	OE1	GLN	1553	-15.491	12.210	11.363	1.00	37.88
	ATOM	744	NE2	GLN	1553	-13.798	10.858	10.770	1.00	37.67
	ATOM	747	C	GLN	1553	-13.671	13.079	15.451	1.00	41.28
	ATOM	748	O	GLN	1553	-13.150	12.758	16.513	1.00	41.37
	ATOM	749	N	ASP	1554	-14.282	14.246	15.243	1.00	44.93
15	ATOM	751	CA	ASP	1554	-14.487	15.254	16.281	1.00	48.05
	ATOM	752	CB	ASP	1554	-15.828	15.009	16.975	1.00	50.80
	ATOM	753	CG	ASP	1554	-17.007	15.281	16.067	1.00	56.88
	ATOM	754	OD1	ASP	1554	-17.921	16.019	16.491	1.00	63.89
	ATOM	755	OD2	ASP	1554	-17.016	14.776	14.925	1.00	58.98
	ATOM	756	C	ASP	1554	-13.367	15.366	17.316	1.00	48.04
	ATOM	757	O	ASP	1554	-13.556	15.056	18.502	1.00	48.73
	ATOM	758	N	GLY	1555	-12.205	15.819	16.860	1.00	44.30
	ATOM	760	CA	GLY	1555	-11.080	15.960	17.756	1.00	42.32
20	ATOM	761	C	GLY	1555	-9.761	15.713	17.052	1.00	40.69
	ATOM	762	O	GLY	1555	-9.740	15.465	15.848	1.00	40.71
	ATOM	763	N	PRO	1556	-8.644	15.776	17.782	1.00	39.49
	ATOM	764	CD	PRO	1556	-8.585	15.983	19.235	1.00	40.36
	ATOM	765	CA	PRO	1556	-7.298	15.566	17.250	1.00	38.37
	ATOM	766	CB	PRO	1556	-6.405	15.771	18.470	1.00	38.47
	ATOM	767	CG	PRO	1556	-7.226	16.573	19.388	1.00	41.77
	ATOM	768	C	PRO	1556	-7.140	14.154	16.746	1.00	36.92
	ATOM	769	O	PRO	1556	-7.606	13.208	17.371	1.00	37.04
25	ATOM	770	N	LEU	1557	-6.447	14.017	15.627	1.00	36.70
	ATOM	772	CA	LEU	1557	-6.201	12.719	15.037	1.00	34.81
	ATOM	773	CB	LEU	1557	-5.528	12.885	13.664	1.00	32.49
	ATOM	774	CG	LEU	1557	-5.004	11.623	12.954	1.00	30.83
	ATOM	775	CD1	LEU	1557	-6.146	10.655	12.664	1.00	26.28
	ATOM	776	CD2	LEU	1557	-4.283	12.014	11.672	1.00	25.55
	ATOM	777	C	LEU	1557	-5.290	11.925	15.961	1.00	33.63
	ATOM	778	O	LEU	1557	-4.229	12.410	16.369	1.00	33.62
	ATOM	779	N	TYR	1558	-5.718	10.724	16.319	1.00	31.97
30	ATOM	781	CA	TYR	1558	-4.902	9.863	17.147	1.00	31.81
	ATOM	782	CB	TYR	1558	-5.614	9.500	18.462	1.00	33.55
	ATOM	783	CG	TYR	1558	-5.710	10.638	19.461	1.00	35.33
	ATOM	784	CD1	TYR	1558	-6.644	10.608	20.499	1.00	35.68
	ATOM	785	CE1	TYR	1558	-6.757	11.670	21.394	1.00	38.60
	ATOM	786	CD2	TYR	1558	-4.883	11.759	19.349	1.00	38.62
	ATOM	787	CE2	TYR	1558	-4.985	12.824	20.235	1.00	40.33
	ATOM	788	CZ	TYR	1558	-5.924	12.781	21.254	1.00	41.70
	ATOM	789	OH	TYR	1558	-6.040	13.867	22.104	1.00	42.66
35	ATOM	791	C	TYR	1558	-4.607	8.604	16.345	1.00	31.08
	ATOM	792	O	TYR	1558	-5.527	7.937	15.857	1.00	31.28
	ATOM	793	N	VAL	1559	-3.328	8.336	16.116	1.00	28.34
	ATOM	795	CA	VAL	1559	-2.934	7.132	15.403	1.00	26.39
	ATOM	796	CB	VAL	1559	-1.830	7.401	14.364	1.00	29.17

	ATOM	797	CG1	VAL	1559	-1.463	6.103	13.648	1.00	26.25
	ATOM	798	CG2	VAL	1559	-2.297	8.461	13.360	1.00	29.56
	ATOM	799	C	VAL	1559	-2.411	6.226	16.498	1.00	25.14
	ATOM	800	O	VAL	1559	-1.396	6.522	17.120	1.00	28.04
	ATOM	801	N	ILE	1560	-3.164	5.171	16.783	1.00	25.28
	ATOM	803	CA	ILE	1560	-2.832	4.208	17.831	1.00	24.81
	ATOM	804	CB	ILE	1560	-4.133	3.669	18.496	1.00	24.63
5	ATOM	805	CG2	ILE	1560	-3.790	2.812	19.728	1.00	20.93
	ATOM	806	CG1	ILE	1560	-5.044	4.854	18.869	1.00	22.94
	ATOM	807	CD1	ILE	1560	-6.499	4.502	19.028	1.00	25.34
	ATOM	808	C	ILE	1560	-1.994	3.051	17.286	1.00	26.38
	ATOM	809	O	ILE	1560	-2.429	2.301	16.398	1.00	26.14
	ATOM	810	N	VAL	1561	-0.782	2.911	17.809	1.00	27.31
	ATOM	812	CA	VAL	1561	0.112	1.852	17.359	1.00	27.32
	ATOM	813	CB	VAL	1561	1.309	2.435	16.527	1.00	25.01
	ATOM	814	CG1	VAL	1561	0.785	3.220	15.338	1.00	19.39
10	ATOM	815	CG2	VAL	1561	2.170	3.340	17.397	1.00	26.08
	ATOM	816	C	VAL	1561	0.615	1.029	18.548	1.00	25.89
	ATOM	817	O	VAL	1561	0.364	1.373	19.713	1.00	25.64
	ATOM	818	N	GLU	1562	1.288	-0.076	18.250	1.00	24.49
	ATOM	820	CA	GLU	1562	1.806	-0.949	19.284	1.00	25.00
	ATOM	821	CB	GLU	1562	2.357	-2.231	18.677	1.00	23.69
	ATOM	822	CG	GLU	1562	1.272	-3.170	18.219	1.00	24.29
	ATOM	823	CD	GLU	1562	1.814	-4.393	17.514	1.00	27.65
	ATOM	824	OE1	GLU	1562	1.218	-5.480	17.649	1.00	29.50
15	ATOM	825	OE2	GLU	1562	2.832	-4.270	16.807	1.00	32.34
	ATOM	826	C	GLU	1562	2.840	-0.279	20.170	1.00	27.27
	ATOM	827	O	GLU	1562	3.596	0.576	19.729	1.00	26.18
	ATOM	828	N	TYR	1563	2.822	-0.663	21.441	1.00	30.39
	ATOM	830	CA	TYR	1563	3.715	-0.121	22.454	1.00	32.48
	ATOM	831	CB	TYR	1563	2.932	0.132	23.750	1.00	33.91
	ATOM	832	CG	TYR	1563	3.788	0.535	24.928	1.00	34.93
	ATOM	833	CD1	TYR	1563	4.606	1.664	24.871	1.00	34.50
	ATOM	834	CE1	TYR	1563	5.374	2.051	25.967	1.00	37.77
20	ATOM	835	CD2	TYR	1563	3.758	-0.201	26.108	1.00	33.54
	ATOM	836	CE2	TYR	1563	4.519	0.171	27.205	1.00	34.94
	ATOM	837	CZ	TYR	1563	5.321	1.296	27.128	1.00	37.22
	ATOM	838	OH	TYR	1563	6.087	1.648	28.206	1.00	45.36
	ATOM	840	C	TYR	1563	4.896	-1.039	22.730	1.00	31.53
	ATOM	841	O	TYR	1563	4.737	-2.252	22.895	1.00	30.43
	ATOM	842	N	ALA	1564	6.082	-0.444	22.761	1.00	32.28
	ATOM	844	CA	ALA	1564	7.326	-1.167	23.026	1.00	32.59
	ATOM	845	CB	ALA	1564	8.308	-0.957	21.863	1.00	30.11
25	ATOM	846	C	ALA	1564	7.897	-0.608	24.334	1.00	31.81
	ATOM	847	O	ALA	1564	8.563	0.427	24.345	1.00	34.11
	ATOM	848	N	SER	1565	7.619	-1.296	25.434	1.00	34.09
	ATOM	850	CA	SER	1565	8.039	-0.853	26.763	1.00	35.05
	ATOM	851	CB	SER	1565	7.400	-1.725	27.829	1.00	30.13
	ATOM	852	OG	SER	1565	7.689	-3.084	27.579	1.00	38.17
	ATOM	854	C	SER	1565	9.526	-0.769	27.041	1.00	35.03
	ATOM	855	O	SER	1565	9.947	-0.001	27.902	1.00	37.12
	ATOM	856	N	LYS	1566	10.321	-1.557	26.330	1.00	34.55
30	ATOM	858	CA	LYS	1566	11.756	-1.559	26.562	1.00	33.48
	ATOM	859	CB	LYS	1566	12.291	-2.990	26.508	1.00	31.90
	ATOM	860	CG	LYS	1566	11.674	-3.865	27.586	1.00	28.63
	ATOM	861	CD	LYS	1566	12.162	-5.287	27.508	1.00	34.97
	ATOM	862	CE	LYS	1566	11.763	-6.042	28.761	1.00	36.82
	ATOM	863	NZ	LYS	1566	12.288	-7.433	28.748	1.00	41.32
	ATOM	867	C	LYS	1566	12.567	-0.613	25.691	1.00	34.98
	ATOM	868	O	LYS	1566	13.785	-0.740	25.607	1.00	38.03
	ATOM	869	N	GLY	1567	11.892	0.338	25.049	1.00	36.00
35	ATOM	871	CA	GLY	1567	12.582	1.322	24.222	1.00	34.14
	ATOM	872	C	GLY	1567	13.245	0.864	22.933	1.00	32.01
	ATOM	873	O	GLY	1567	12.975	-0.222	22.439	1.00	31.95
	ATOM	874	N	ASN	1568	14.091	1.719	22.360	1.00	33.51
	ATOM	876	CA	ASN	1568	14.774	1.375	21.121	1.00	34.20

	ATOM	877	CB	ASN	1568	15.203	2.627	20.332	1.00	34.07
	ATOM	878	CG	ASN	1568	16.420	3.321	20.910	1.00	35.09
	ATOM	879	OD1	ASN	1568	17.453	2.709	21.156	1.00	34.36
	ATOM	880	ND2	ASN	1568	16.317	4.624	21.066	1.00	38.38
	ATOM	883	C	ASN	1568	15.927	0.401	21.325	1.00	33.38
	ATOM	884	O	ASN	1568	16.490	0.315	22.414	1.00	34.93
	ATOM	885	N	LEU	1569	16.276	-0.317	20.263	1.00	31.11
5	ATOM	887	CA	LEU	1569	17.333	-1.316	20.298	1.00	30.44
	ATOM	888	CB	LEU	1569	17.437	-2.008	18.928	1.00	29.46
	ATOM	889	CG	LEU	1569	18.438	-3.148	18.741	1.00	29.01
	ATOM	890	CD1	LEU	1569	18.285	-4.219	19.840	1.00	28.81
	ATOM	891	CD2	LEU	1569	18.263	-3.740	17.338	1.00	26.62
	ATOM	892	C	LEU	1569	18.706	-0.805	20.762	1.00	30.16
	ATOM	893	O	LEU	1569	19.400	-1.501	21.496	1.00	27.32
	ATOM	894	N	ARG	1570	19.097	0.396	20.344	1.00	30.74
	ATOM	896	CA	ARG	1570	20.386	0.951	20.758	1.00	33.72
10	ATOM	897	CB	ARG	1570	20.597	2.349	20.160	1.00	32.82
	ATOM	898	CG	ARG	1570	21.873	3.009	20.662	1.00	36.90
	ATOM	899	CD	ARG	1570	21.966	4.481	20.332	1.00	39.32
	ATOM	900	NE	ARG	1570	20.749	5.222	20.664	1.00	50.32
	ATOM	902	CZ	ARG	1570	20.376	5.600	21.889	1.00	51.90
	ATOM	903	NH1	ARG	1570	21.118	5.316	22.960	1.00	50.15
	ATOM	906	NH2	ARG	1570	19.246	6.284	22.033	1.00	53.67
	ATOM	909	C	ARG	1570	20.434	1.022	22.298	1.00	35.75
	ATOM	910	O	ARG	1570	21.324	0.444	22.939	1.00	35.67
15	ATOM	911	N	GLU	1571	19.444	1.695	22.880	1.00	35.56
	ATOM	913	CA	GLU	1571	19.331	1.835	24.328	1.00	36.50
	ATOM	914	CB	GLU	1571	18.055	2.607	24.667	1.00	39.08
	ATOM	915	CG	GLU	1571	18.061	4.056	24.208	1.00	46.75
	ATOM	916	CD	GLU	1571	16.694	4.721	24.311	1.00	51.36
	ATOM	917	OE1	GLU	1571	15.676	3.996	24.417	1.00	55.22
	ATOM	918	OE2	GLU	1571	16.635	5.972	24.267	1.00	53.59
	ATOM	919	C	GLU	1571	19.314	0.469	25.022	1.00	34.82
	ATOM	920	O	GLU	1571	20.018	0.242	26.013	1.00	35.05
20	ATOM	921	N	TYR	1572	18.520	-0.441	24.469	1.00	33.35
	ATOM	923	CA	TYR	1572	18.366	-1.796	24.986	1.00	31.83
	ATOM	924	CB	TYR	1572	17.365	-2.544	24.102	1.00	30.77
	ATOM	925	CG	TYR	1572	17.170	-4.008	24.408	1.00	28.50
	ATOM	926	CD1	TYR	1572	16.193	-4.420	25.313	1.00	30.48
	ATOM	927	CE1	TYR	1572	15.977	-5.760	25.574	1.00	30.97
	ATOM	928	CD2	TYR	1572	17.933	-4.985	23.772	1.00	26.14
	ATOM	929	CE2	TYR	1572	17.725	-6.329	24.027	1.00	26.21
	ATOM	930	CZ	TYR	1572	16.742	-6.708	24.935	1.00	30.30
25	ATOM	931	OH	TYR	1572	16.518	-8.041	25.214	1.00	33.52
	ATOM	933	C	TYR	1572	19.692	-2.556	25.044	1.00	34.83
	ATOM	934	O	TYR	1572	19.959	-3.308	25.992	1.00	34.93
	ATOM	935	N	LEU	1573	20.517	-2.370	24.020	1.00	34.34
	ATOM	937	CA	LEU	1573	21.803	-3.053	23.961	1.00	35.38
	ATOM	938	CB	LEU	1573	22.357	-3.027	22.531	1.00	32.71
	ATOM	939	CG	LEU	1573	21.669	-3.891	21.464	1.00	29.16
	ATOM	940	CD1	LEU	1573	22.161	-3.503	20.087	1.00	26.98
	ATOM	941	CD2	LEU	1573	21.932	-5.351	21.710	1.00	28.85
30	ATOM	942	C	LEU	1573	22.799	-2.420	24.933	1.00	37.54
	ATOM	943	O	LEU	1573	23.511	-3.123	25.659	1.00	36.67
	ATOM	944	N	GLN	1574	22.814	-1.092	24.969	1.00	37.90
	ATOM	946	CA	GLN	1574	23.729	-0.368	25.838	1.00	39.77
	ATOM	947	CB	GLN	1574	23.624	1.138	25.572	1.00	40.09
	ATOM	948	CG	GLN	1574	24.208	1.549	24.217	1.00	42.28
	ATOM	949	CD	GLN	1574	24.030	3.018	23.896	1.00	44.28
	ATOM	950	OE1	GLN	1574	23.362	3.755	24.615	1.00	47.55
	ATOM	951	NE2	GLN	1574	24.613	3.448	22.790	1.00	46.09
35	ATOM	954	C	GLN	1574	23.490	-0.697	27.310	1.00	40.75
	ATOM	955	O	GLN	1574	24.440	-0.939	28.059	1.00	41.29
	ATOM	956	N	ALA	1575	22.220	-0.783	27.696	1.00	40.10
	ATOM	958	CA	ALA	1575	21.842	-1.088	29.069	1.00	38.81
	ATOM	959	CB	ALA	1575	20.349	-0.819	29.273	1.00	35.69

	ATOM	960	C	ALA	1575	22.192	-2.514	29.503	1.00	40.63
	ATOM	961	O	ALA	1575	22.098	-2.843	30.690	1.00	43.39
	ATOM	962	N	ARG	1576	22.602	-3.357	28.561	1.00	38.39
	ATOM	964	CA	ARG	1576	22.945	-4.729	28.896	1.00	37.69
	ATOM	965	CB	ARG	1576	22.034	-5.689	28.137	1.00	38.16
	ATOM	966	CG	ARG	1576	20.594	-5.547	28.589	1.00	37.89
	ATOM	967	CD	ARG	1576	19.622	-6.281	27.711	1.00	37.36
5	ATOM	968	NE	ARG	1576	18.267	-6.255	28.265	1.00	34.99
	ATOM	970	CZ	ARG	1576	17.565	-5.150	28.484	1.00	36.94
	ATOM	971	NH1	ARG	1576	18.083	-3.960	28.209	1.00	36.18
	ATOM	974	NH2	ARG	1576	16.310	-5.237	28.909	1.00	40.93
	ATOM	977	C	ARG	1576	24.413	-5.073	28.704	1.00	38.93
	ATOM	978	O	ARG	1576	24.801	-6.249	28.699	1.00	39.75
	ATOM	979	N	ARG	1577	25.233	-4.036	28.570	1.00	39.21
	ATOM	981	CA	ARG	1577	26.671	-4.196	28.413	1.00	38.97
	ATOM	982	CB	ARG	1577	27.307	-2.870	28.000	1.00	36.06
10	ATOM	983	CG	ARG	1577	26.992	-2.408	26.610	1.00	36.41
	ATOM	984	CD	ARG	1577	27.695	-1.094	26.337	1.00	36.17
	ATOM	985	NE	ARG	1577	27.776	-0.806	24.907	1.00	38.45
	ATOM	987	CZ	ARG	1577	28.284	0.309	24.387	1.00	39.00
	ATOM	988	NH1	ARG	1577	28.764	1.262	25.175	1.00	38.88
	ATOM	991	NH2	ARG	1577	28.311	0.469	23.071	1.00	37.76
	ATOM	994	C	ARG	1577	27.247	-4.571	29.772	1.00	40.59
	ATOM	995	O	ARG	1577	26.680	-4.217	30.800	1.00	38.52
	ATOM	996	N	PRO	1578	28.358	-5.327	29.796	1.00	43.19
15	ATOM	997	CD	PRO	1578	29.077	-5.980	28.692	1.00	44.84
	ATOM	998	CA	PRO	1578	28.952	-5.692	31.088	1.00	45.06
	ATOM	999	CB	PRO	1578	30.065	-6.673	30.689	1.00	44.86
	ATOM	1000	CG	PRO	1578	30.431	-6.229	29.308	1.00	44.56
	ATOM	1001	C	PRO	1578	29.513	-4.420	31.734	1.00	44.93
	ATOM	1002	O	PRO	1578	29.809	-3.439	31.043	1.00	43.13
	ATOM	1003	N	PRO	1579	29.649	-4.414	33.067	1.00	47.61
	ATOM	1004	CD	PRO	1579	29.315	-5.492	34.012	1.00	48.39
	ATOM	1005	CA	PRO	1579	30.173	-3.247	33.784	1.00	48.74
20	ATOM	1006	CB	PRO	1579	30.138	-3.706	35.238	1.00	49.73
	ATOM	1007	CG	PRO	1579	29.027	-4.711	35.259	1.00	49.21
	ATOM	1008	C	PRO	1579	31.591	-2.888	33.357	1.00	49.67
	ATOM	1009	O	PRO	1579	32.483	-3.733	33.361	1.00	52.07
	ATOM	1010	N	GLU	1592	19.165	-5.411	32.444	1.00	64.83
	ATOM	1012	CA	GLU	1592	20.603	-5.147	32.491	1.00	64.82
	ATOM	1013	CB	GLU	1592	20.969	-4.421	33.784	1.00	67.61
	ATOM	1014	C	GLU	1592	21.448	-6.413	32.335	1.00	63.99
	ATOM	1015	O	GLU	1592	22.653	-6.336	32.098	1.00	65.67
25	ATOM	1016	N	GLU	1593	20.821	-7.575	32.485	1.00	62.41
	ATOM	1018	CA	GLU	1593	21.534	-8.844	32.342	1.00	61.23
	ATOM	1019	CB	GLU	1593	20.595	-10.017	32.600	1.00	61.20
	ATOM	1020	C	GLU	1593	22.141	-8.953	30.944	1.00	59.26
	ATOM	1021	O	GLU	1593	21.494	-8.631	29.945	1.00	59.84
	ATOM	1022	N	GLN	1594	23.388	-9.405	30.888	1.00	57.94
	ATOM	1024	CA	GLN	1594	24.101	-9.558	29.625	1.00	54.91
	ATOM	1025	CB	GLN	1594	25.501	-10.141	29.865	1.00	55.13
	ATOM	1026	CG	GLN	1594	26.439	-9.252	30.679	1.00	56.93
30	ATOM	1027	CD	GLN	1594	27.682	-9.997	31.180	1.00	59.60
	ATOM	1028	OE1	GLN	1594	28.241	-10.858	30.488	1.00	58.45
	ATOM	1029	NE2	GLN	1594	28.117	-9.662	32.393	1.00	58.95
	ATOM	1032	C	GLN	1594	23.331	-10.438	28.640	1.00	52.30
	ATOM	1033	O	GLN	1594	22.637	-11.389	29.025	1.00	52.03
	ATOM	1034	N	LEU	1595	23.438	-10.091	27.366	1.00	49.60
	ATOM	1036	CA	LEU	1595	22.782	-10.836	26.308	1.00	45.16
	ATOM	1037	CB	LEU	1595	22.459	-9.907	25.135	1.00	41.36
	ATOM	1038	CG	LEU	1595	21.463	-8.815	25.523	1.00	39.43
35	ATOM	1039	CD1	LEU	1595	21.617	-7.583	24.644	1.00	36.21
	ATOM	1040	CD2	LEU	1595	20.060	-9.389	25.480	1.00	34.91
	ATOM	1041	C	LEU	1595	23.747	-11.900	25.858	1.00	43.30
	ATOM	1042	O	LEU	1595	24.953	-11.675	25.841	1.00	43.62
	ATOM	1043	N	SER	1596	23.230	-13.081	25.553	1.00	42.92

	ATOM	1045	CA	SER	1596	24.085	-14.150	25.077	1.00	41.86
	ATOM	1046	CB	SER	1596	23.410	-15.502	25.298	1.00	40.86
	ATOM	1047	OG	SER	1596	22.188	-15.596	24.595	1.00	37.88
	ATOM	1049	C	SER	1596	24.322	-13.914	23.587	1.00	41.59
	ATOM	1050	O	SER	1596	23.657	-13.077	22.966	1.00	41.94
	ATOM	1051	N	SER	1597	25.275	-14.637	23.018	1.00	39.60
	ATOM	1053	CA	SER	1597	25.557	-14.518	21.603	1.00	39.74
5	ATOM	1054	CB	SER	1597	26.729	-15.409	21.223	1.00	41.38
	ATOM	1055	OG	SER	1597	27.824	-15.147	22.077	1.00	50.59
	ATOM	1057	C	SER	1597	24.315	-14.921	20.818	1.00	38.16
	ATOM	1058	O	SER	1597	24.036	-14.353	19.769	1.00	38.03
	ATOM	1059	N	LYS	1598	23.560	-15.891	21.327	1.00	36.40
	ATOM	1061	CA	LYS	1598	22.362	-16.312	20.634	1.00	35.97
	ATOM	1062	CB	LYS	1598	21.791	-17.594	21.228	1.00	36.69
	ATOM	1063	CG	LYS	1598	20.989	-18.402	20.198	1.00	40.42
	ATOM	1064	CD	LYS	1598	20.164	-19.499	20.838	1.00	40.37
10	ATOM	1065	CE	LYS	1598	19.792	-20.572	19.829	1.00	46.34
	ATOM	1066	NZ	LYS	1598	20.993	-21.338	19.362	1.00	45.29
	ATOM	1070	C	LYS	1598	21.324	-15.194	20.696	1.00	37.49
	ATOM	1071	O	LYS	1598	20.567	-14.983	19.738	1.00	38.10
	ATOM	1072	N	ASP	1599	21.316	-14.458	21.807	1.00	35.21
	ATOM	1074	CA	ASP	1599	20.380	-13.352	21.983	1.00	34.02
	ATOM	1075	CB	ASP	1599	20.556	-12.686	23.346	1.00	37.78
	ATOM	1076	CG	ASP	1599	19.970	-13.493	24.483	1.00	40.05
	ATOM	1077	OD1	ASP	1599	20.270	-13.143	25.642	1.00	42.73
15	ATOM	1078	OD2	ASP	1599	19.204	-14.450	24.235	1.00	42.39
	ATOM	1079	C	ASP	1599	20.633	-12.306	20.922	1.00	32.84
	ATOM	1080	O	ASP	1599	19.694	-11.779	20.311	1.00	30.59
	ATOM	1081	N	LEU	1600	21.912	-11.999	20.724	1.00	31.11
	ATOM	1083	CA	LEU	1600	22.323	-10.998	19.744	1.00	32.17
	ATOM	1084	CB	LEU	1600	23.823	-10.722	19.875	1.00	32.30
	ATOM	1085	CG	LEU	1600	24.275	-10.162	21.235	1.00	31.08
	ATOM	1086	CD1	LEU	1600	25.794	-9.931	21.242	1.00	30.59
	ATOM	1087	CD2	LEU	1600	23.549	-8.863	21.514	1.00	28.89
20	ATOM	1088	C	LEU	1600	21.949	-11.390	18.311	1.00	30.77
	ATOM	1089	O	LEU	1600	21.352	-10.601	17.574	1.00	29.87
	ATOM	1090	N	VAL	1601	22.269	-12.623	17.933	1.00	30.19
	ATOM	1092	CA	VAL	1601	21.954	-13.115	16.602	1.00	29.25
	ATOM	1093	CB	VAL	1601	22.593	-14.497	16.349	1.00	31.27
	ATOM	1094	CG1	VAL	1601	22.355	-14.936	14.914	1.00	31.60
	ATOM	1095	CG2	VAL	1601	24.093	-14.434	16.622	1.00	31.91
	ATOM	1096	C	VAL	1601	20.438	-13.181	16.405	1.00	29.06
	ATOM	1097	O	VAL	1601	19.946	-12.914	15.310	1.00	27.71
25	ATOM	1098	N	SER	1602	19.702	-13.511	17.468	1.00	29.10
	ATOM	1100	CA	SER	1602	18.243	-13.585	17.400	1.00	29.29
	ATOM	1101	CB	SER	1602	17.680	-14.189	18.679	1.00	30.81
	ATOM	1102	OG	SER	1602	16.266	-14.074	18.692	1.00	35.78
	ATOM	1104	C	SER	1602	17.649	-12.199	17.156	1.00	28.98
	ATOM	1105	O	SER	1602	16.662	-12.039	16.426	1.00	26.82
	ATOM	1106	N	CYS	1603	18.274	-11.202	17.765	1.00	29.06
	ATOM	1108	CA	CYS	1603	17.870	-9.823	17.599	1.00	29.22
	ATOM	1109	CB	CYS	1603	18.784	-8.943	18.438	1.00	29.66
30	ATOM	1110	SG	CYS	1603	18.575	-7.212	18.103	0.50	23.69
	ATOM	1111	C	CYS	1603	17.988	-9.422	16.112	1.00	29.23
	ATOM	1112	O	CYS	1603	17.087	-8.796	15.552	1.00	27.52
	ATOM	1113	N	ALA	1604	19.113	-9.778	15.491	1.00	27.87
	ATOM	1115	CA	ALA	1604	19.376	-9.484	14.077	1.00	26.37
	ATOM	1116	CB	ALA	1604	20.783	-9.941	13.690	1.00	23.88
	ATOM	1117	C	ALA	1604	18.349	-10.203	13.223	1.00	25.82
	ATOM	1118	O	ALA	1604	17.788	-9.631	12.289	1.00	25.84
	ATOM	1119	N	TYR	1605	18.119	-11.468	13.544	1.00	25.56
35	ATOM	1121	CA	TYR	1605	17.152	-12.276	12.827	1.00	27.81
	ATOM	1122	CB	TYR	1605	17.080	-13.662	13.456	1.00	26.66
	ATOM	1123	CG	TYR	1605	15.974	-14.515	12.886	1.00	30.75
	ATOM	1124	CD1	TYR	1605	16.111	-15.141	11.640	1.00	30.20
	ATOM	1125	CE1	TYR	1605	15.088	-15.944	11.126	1.00	30.03

PRT1

	ATOM	1126	CD2	TYR	1605	14.790	-14.707	13.596	1.00	30.73
	ATOM	1127	CE2	TYR	1605	13.775	-15.500	13.097	1.00	30.71
	ATOM	1128	CZ	TYR	1605	13.930	-16.117	11.867	1.00	30.93
	ATOM	1129	OH	TYR	1605	12.923	-16.928	11.417	1.00	32.31
	ATOM	1131	C	TYR	1605	15.748	-11.641	12.775	1.00	26.15
	ATOM	1132	O	TYR	1605	15.147	-11.551	11.702	1.00	26.64
	ATOM	1133	N	GLN	1606	15.244	-11.200	13.926	1.00	25.48
5	ATOM	1135	CA	GLN	1606	13.921	-10.581	14.023	1.00	26.86
	ATOM	1136	CB	GLN	1606	13.589	-10.269	15.482	1.00	26.83
	ATOM	1137	CG	GLN	1606	13.357	-11.508	16.332	1.00	25.84
	ATOM	1138	CD	GLN	1606	13.151	-11.167	17.791	1.00	30.86
	ATOM	1139	OE1	GLN	1606	12.202	-10.471	18.150	1.00	31.87
	ATOM	1140	NE2	GLN	1606	14.056	-11.631	18.640	1.00	31.67
	ATOM	1143	C	GLN	1606	13.835	-9.310	13.186	1.00	27.52
	ATOM	1144	O	GLN	1606	12.831	-9.058	12.506	1.00	26.05
	ATOM	1145	N	VAL	1607	14.904	-8.523	13.216	1.00	26.68
10	ATOM	1147	CA	VAL	1607	14.963	-7.301	12.435	1.00	25.66
	ATOM	1148	CB	VAL	1607	16.225	-6.485	12.787	1.00	28.50
	ATOM	1149	CG1	VAL	1607	16.363	-5.274	11.853	1.00	26.04
	ATOM	1150	CG2	VAL	1607	16.151	-6.031	14.246	1.00	24.45
	ATOM	1151	C	VAL	1607	14.934	-7.641	10.938	1.00	24.89
	ATOM	1152	O	VAL	1607	14.184	-7.033	10.177	1.00	25.86
	ATOM	1153	N	ALA	1608	15.738	-8.619	10.522	1.00	25.24
	ATOM	1155	CA	ALA	1608	15.773	-9.039	9.120	1.00	22.95
	ATOM	1156	CB	ALA	1608	16.813	-10.117	8.920	1.00	20.24
15	ATOM	1157	C	ALA	1608	14.383	-9.541	8.679	1.00	25.71
	ATOM	1158	O	ALA	1608	13.963	-9.319	7.532	1.00	27.48
	ATOM	1159	N	ARG	1609	13.676	-10.216	9.585	1.00	27.10
	ATOM	1161	CA	ARG	1609	12.327	-10.708	9.301	1.00	28.55
	ATOM	1162	CB	ARG	1609	11.840	-11.640	10.397	1.00	31.53
	ATOM	1163	CG	ARG	1609	12.407	-13.005	10.290	1.00	36.05
	ATOM	1164	CD	ARG	1609	11.537	-13.931	11.056	1.00	40.28
	ATOM	1165	NE	ARG	1609	10.849	-14.874	10.190	1.00	42.06
	ATOM	1167	CZ	ARG	1609	9.974	-15.771	10.632	1.00	42.08
20	ATOM	1168	NH1	ARG	1609	9.678	-15.834	11.928	1.00	40.32
	ATOM	1171	NH2	ARG	1609	9.416	-16.620	9.784	1.00	43.27
	ATOM	1174	C	ARG	1609	11.329	-9.569	9.124	1.00	25.55
	ATOM	1175	O	ARG	1609	10.469	-9.621	8.231	1.00	26.98
	ATOM	1176	N	GLY	1610	11.418	-8.565	9.996	1.00	23.92
	ATOM	1178	CA	GLY	1610	10.555	-7.406	9.870	1.00	22.19
	ATOM	1179	C	GLY	1610	10.800	-6.747	8.512	1.00	25.92
	ATOM	1180	O	GLY	1610	9.855	-6.424	7.772	1.00	23.49
	ATOM	1181	N	MET	1611	12.076	-6.589	8.163	1.00	23.15
25	ATOM	1183	CA	MET	1611	12.456	-5.989	6.888	1.00	22.57
	ATOM	1184	CB	MET	1611	13.956	-5.710	6.849	1.00	22.18
	ATOM	1185	CG	MET	1611	14.398	-4.542	7.729	1.00	22.63
	ATOM	1186	SD	MET	1611	13.478	-3.006	7.426	1.00	25.23
	ATOM	1187	CE	MET	1611	13.812	-2.688	5.675	1.00	21.38
	ATOM	1188	C	MET	1611	12.050	-6.848	5.681	1.00	23.96
	ATOM	1189	O	MET	1611	11.673	-6.326	4.633	1.00	25.26
	ATOM	1190	N	GLU	1612	12.130	-8.163	5.822	1.00	24.34
	ATOM	1192	CA	GLU	1612	11.755	-9.043	4.733	1.00	25.56
30	ATOM	1193	CB	GLU	1612	12.018	-10.494	5.121	1.00	24.96
	ATOM	1194	CG	GLU	1612	11.703	-11.488	4.009	1.00	26.79
	ATOM	1195	CD	GLU	1612	11.812	-12.931	4.450	1.00	26.96
	ATOM	1196	OE1	GLU	1612	11.557	-13.212	5.636	1.00	30.98
	ATOM	1197	OE2	GLU	1612	12.154	-13.791	3.611	1.00	32.31
	ATOM	1198	C	GLU	1612	10.267	-8.829	4.415	1.00	25.70
	ATOM	1199	O	GLU	1612	9.860	-8.753	3.252	1.00	24.30
	ATOM	1200	N	TYR	1613	9.463	-8.723	5.465	1.00	23.55
	ATOM	1202	CA	TYR	1613	8.037	-8.501	5.294	1.00	22.94
35	ATOM	1203	CB	TYR	1613	7.314	-8.586	6.650	1.00	24.00
	ATOM	1204	CG	TYR	1613	5.841	-8.281	6.549	1.00	22.93
	ATOM	1205	CD1	TYR	1613	4.945	-9.245	6.097	1.00	21.60
	ATOM	1206	CE1	TYR	1613	3.582	-8.962	5.963	1.00	21.14
	ATOM	1207	CD2	TYR	1613	5.347	-7.018	6.869	1.00	25.81

	ATOM	1208	CE2	TYR	1613	3.979	-6.718	6.733	1.00	24.45
	ATOM	1209	CZ	TYR	1613	3.112	-7.697	6.281	1.00	23.28
	ATOM	1210	OH	TYR	1613	1.775	-7.411	6.126	1.00	22.95
	ATOM	1212	C	TYR	1613	7.803	-7.138	4.637	1.00	22.57
	ATOM	1213	O	TYR	1613	7.022	-7.024	3.699	1.00	24.72
	ATOM	1214	N	LEU	1614	8.460	-6.101	5.156	1.00	22.16
	ATOM	1216	CA	LEU	1614	8.334	-4.755	4.615	1.00	22.60
5	ATOM	1217	CB	LEU	1614	9.175	-3.772	5.440	1.00	22.56
	ATOM	1218	CG	LEU	1614	8.577	-3.415	6.802	1.00	24.92
	ATOM	1219	CD1	LEU	1614	9.535	-2.541	7.580	1.00	21.46
	ATOM	1220	CD2	LEU	1614	7.218	-2.711	6.611	1.00	21.87
	ATOM	1221	C	LEU	1614	8.699	-4.683	3.124	1.00	23.76
	ATOM	1222	O	LEU	1614	7.975	-4.077	2.326	1.00	23.84
	ATOM	1223	N	ALA	1615	9.809	-5.314	2.744	1.00	23.48
	ATOM	1225	CA	ALA	1615	10.232	-5.340	1.352	1.00	22.70
	ATOM	1226	CB	ALA	1615	11.591	-6.019	1.215	1.00	21.52
10	ATOM	1227	C	ALA	1615	9.188	-6.063	0.505	1.00	22.87
	ATOM	1228	O	ALA	1615	8.854	-5.591	-0.581	1.00	24.23
	ATOM	1229	N	SER	1616	8.652	-7.176	1.015	1.00	22.76
	ATOM	1231	CA	SER	1616	7.638	-7.954	0.295	1.00	22.88
	ATOM	1232	CB	SER	1616	7.315	-9.251	1.039	1.00	21.39
	ATOM	1233	OG	SER	1616	6.400	-9.036	2.102	1.00	26.24
	ATOM	1235	C	SER	1616	6.360	-7.131	0.044	1.00	24.88
	ATOM	1236	O	SER	1616	5.635	-7.358	-0.927	1.00	24.73
	ATOM	1237	N	LYS	1617	6.104	-6.173	0.927	1.00	23.82
15	ATOM	1239	CA	LYS	1617	4.970	-5.287	0.810	1.00	22.47
	ATOM	1240	CB	LYS	1617	4.455	-4.914	2.199	1.00	23.62
	ATOM	1241	CG	LYS	1617	3.792	-6.072	2.927	1.00	27.16
	ATOM	1242	CD	LYS	1617	2.551	-6.487	2.169	1.00	30.84
	ATOM	1243	CE	LYS	1617	1.810	-7.602	2.852	1.00	33.57
	ATOM	1244	NZ	LYS	1617	2.484	-8.894	2.653	1.00	44.30
	ATOM	1248	C	LYS	1617	5.346	-4.034	0.035	1.00	23.56
	ATOM	1249	O	LYS	1617	4.639	-3.030	0.091	1.00	25.16
	ATOM	1250	N	LYS	1618	6.495	-4.066	-0.638	1.00	24.69
20	ATOM	1252	CA	LYS	1618	6.953	-2.943	-1.468	1.00	24.04
	ATOM	1253	CB	LYS	1618	5.863	-2.581	-2.492	1.00	26.96
	ATOM	1254	CG	LYS	1618	5.775	-3.491	-3.709	1.00	29.14
	ATOM	1255	CD	LYS	1618	5.567	-4.942	-3.345	1.00	33.91
	ATOM	1256	CE	LYS	1618	5.662	-5.858	-4.558	1.00	32.98
	ATOM	1257	NZ	LYS	1618	4.431	-5.821	-5.380	1.00	36.73
	ATOM	1261	C	LYS	1618	7.406	-1.686	-0.713	1.00	24.01
	ATOM	1262	O	LYS	1618	7.557	-0.606	-1.302	1.00	23.73
	ATOM	1263	N	CYS	1619	7.689	-1.842	0.573	1.00	25.91
25	ATOM	1265	CA	CYS	1619	8.108	-0.731	1.418	1.00	25.65
	ATOM	1266	CB	CYS	1619	7.444	-0.885	2.792	1.00	24.93
	ATOM	1267	SG	CYS	1619	7.941	0.313	4.064	1.00	28.14
	ATOM	1268	C	CYS	1619	9.631	-0.628	1.573	1.00	23.07
	ATOM	1269	O	CYS	1619	10.304	-1.630	1.809	1.00	20.98
	ATOM	1270	N	ILE	1620	10.170	0.573	1.363	1.00	22.95
	ATOM	1272	CA	ILE	1620	11.604	0.841	1.524	1.00	23.81
	ATOM	1273	CB	ILE	1620	12.202	1.607	0.276	1.00	24.36
	ATOM	1274	CG2	ILE	1620	13.670	1.995	0.506	1.00	17.24
30	ATOM	1275	CG1	ILE	1620	12.108	0.739	-0.987	1.00	23.13
	ATOM	1276	CD1	ILE	1620	12.171	1.544	-2.286	1.00	25.37
	ATOM	1277	C	ILE	1620	11.633	1.729	2.771	1.00	24.70
	ATOM	1278	O	ILE	1620	10.981	2.763	2.806	1.00	25.21
	ATOM	1279	N	HIS	1621	12.348	1.297	3.804	1.00	25.62
	ATOM	1281	CA	HIS	1621	12.427	2.041	5.057	1.00	25.53
	ATOM	1282	CB	HIS	1621	13.181	1.237	6.132	1.00	22.76
	ATOM	1283	CG	HIS	1621	13.004	1.773	7.528	1.00	26.42
	ATOM	1284	CD2	HIS	1621	12.356	1.260	8.601	1.00	24.74
35	ATOM	1285	ND1	HIS	1621	13.474	3.011	7.927	1.00	26.62
	ATOM	1287	CE1	HIS	1621	13.119	3.233	9.179	1.00	25.70
	ATOM	1288	NE2	HIS	1621	12.439	2.187	9.616	1.00	26.23
	ATOM	1290	C	HIS	1621	13.073	3.401	4.914	1.00	26.36
	ATOM	1291	O	HIS	1621	12.528	4.405	5.370	1.00	25.89

	ATOM	1292	N	ARG	1622	14.271	3.406	4.341	1.00	25.35
	ATOM	1294	CA	ARG	1622	15.082	4.608	4.140	1.00	25.05
	ATOM	1295	CB	ARG	1622	14.268	5.766	3.540	1.00	20.89
	ATOM	1296	CG	ARG	1622	13.709	5.444	2.175	1.00	19.03
	ATOM	1297	CD	ARG	1622	13.089	6.656	1.488	0.50	14.06
	ATOM	1298	NE	ARG	1622	12.684	6.300	0.131	0.50	11.96
	ATOM	1300	CZ	ARG	1622	11.606	5.577	-0.166	0.50	11.83
5	ATOM	1301	NH1	ARG	1622	10.801	5.137	0.797	0.50	10.20
	ATOM	1304	NH2	ARG	1622	11.366	5.239	-1.425	0.50	8.63
	ATOM	1307	C	ARG	1622	15.877	5.058	5.379	1.00	24.37
	ATOM	1308	O	ARG	1622	16.787	5.863	5.268	1.00	25.17
	ATOM	1309	N	ASP	1623	15.555	4.527	6.552	1.00	24.61
	ATOM	1311	CA	ASP	1623	16.315	4.899	7.748	1.00	28.82
	ATOM	1312	CB	ASP	1623	15.777	6.173	8.410	1.00	32.33
	ATOM	1313	CG	ASP	1623	16.733	6.735	9.469	1.00	36.67
	ATOM	1314	OD1	ASP	1623	16.276	7.520	10.321	1.00	43.56
10	ATOM	1315	OD2	ASP	1623	17.937	6.385	9.463	1.00	36.29
	ATOM	1316	C	ASP	1623	16.408	3.766	8.766	1.00	28.22
	ATOM	1317	O	ASP	1623	16.118	3.937	9.956	1.00	26.87
	ATOM	1318	N	LEU	1624	16.783	2.592	8.278	1.00	26.34
	ATOM	1320	CA	LEU	1624	16.941	1.428	9.132	1.00	26.59
	ATOM	1321	CB	LEU	1624	16.996	0.168	8.265	1.00	24.59
	ATOM	1322	CG	LEU	1624	17.082	-1.175	8.978	1.00	24.72
	ATOM	1323	CD1	LEU	1624	15.844	-1.408	9.856	1.00	24.35
	ATOM	1324	CD2	LEU	1624	17.258	-2.261	7.931	1.00	24.63
15	ATOM	1325	C	LEU	1624	18.210	1.595	10.004	1.00	26.87
	ATOM	1326	O	LEU	1624	19.322	1.777	9.497	1.00	28.19
	ATOM	1327	N	ALA	1625	18.009	1.570	11.317	1.00	27.77
	ATOM	1329	CA	ALA	1625	19.069	1.741	12.309	1.00	24.54
	ATOM	1330	CB	ALA	1625	19.355	3.210	12.494	1.00	19.81
	ATOM	1331	C	ALA	1625	18.498	1.173	13.592	1.00	26.44
	ATOM	1332	O	ALA	1625	17.289	0.961	13.679	1.00	27.58
	ATOM	1333	N	ALA	1626	19.342	0.940	14.594	1.00	25.38
	ATOM	1335	CA	ALA	1626	18.872	0.397	15.865	1.00	24.65
20	ATOM	1336	CB	ALA	1626	20.054	0.023	16.774	1.00	23.35
	ATOM	1337	C	ALA	1626	17.929	1.373	16.578	1.00	25.54
	ATOM	1338	O	ALA	1626	17.057	0.951	17.325	1.00	27.70
	ATOM	1339	N	ARG	1627	18.104	2.671	16.344	1.00	25.06
	ATOM	1341	CA	ARG	1627	17.242	3.675	16.959	1.00	25.48
	ATOM	1342	CB	ARG	1627	17.706	5.089	16.597	1.00	28.15
	ATOM	1343	CG	ARG	1627	17.759	5.370	15.084	1.00	33.13
	ATOM	1344	CD	ARG	1627	18.157	6.811	14.774	1.00	33.29
	ATOM	1345	NE	ARG	1627	18.442	7.011	13.351	1.00	35.74
25	ATOM	1347	CZ	ARG	1627	19.652	6.889	12.813	1.00	37.40
	ATOM	1348	NH1	ARG	1627	20.695	6.585	13.575	1.00	39.73
	ATOM	1351	NH2	ARG	1627	19.817	7.012	11.507	1.00	36.90
	ATOM	1354	C	ARG	1627	15.812	3.491	16.479	1.00	24.81
	ATOM	1355	O	ARG	1627	14.871	3.853	17.173	1.00	24.05
	ATOM	1356	N	ASN	1628	15.667	2.910	15.293	1.00	24.80
	ATOM	1358	CA	ASN	1628	14.368	2.686	14.685	1.00	25.97
	ATOM	1359	CB	ASN	1628	14.383	3.132	13.225	1.00	30.08
	ATOM	1360	CG	ASN	1628	14.417	4.640	13.096	1.00	33.62
30	ATOM	1361	OD1	ASN	1628	13.775	5.347	13.864	1.00	35.11
	ATOM	1362	ND2	ASN	1628	15.212	5.141	12.169	1.00	36.31
	ATOM	1365	C	ASN	1628	13.802	1.288	14.824	1.00	26.03
	ATOM	1366	O	ASN	1628	12.951	0.869	14.031	1.00	26.87
	ATOM	1367	N	VAL	1629	14.330	0.550	15.797	1.00	26.04
	ATOM	1369	CA	VAL	1629	13.854	-0.783	16.128	1.00	25.09
	ATOM	1370	CB	VAL	1629	14.924	-1.876	15.959	1.00	27.00
	ATOM	1371	CG1	VAL	1629	14.390	-3.197	16.546	1.00	20.99
	ATOM	1372	CG2	VAL	1629	15.295	-2.051	14.462	1.00	23.26
35	ATOM	1373	C	VAL	1629	13.504	-0.671	17.600	1.00	27.59
	ATOM	1374	O	VAL	1629	14.340	-0.285	18.418	1.00	25.81
	ATOM	1375	N	LEU	1630	12.245	-0.929	17.923	1.00	28.17
	ATOM	1377	CA	LEU	1630	11.768	-0.845	19.296	1.00	30.20
	ATOM	1378	CB	LEU	1630	10.445	-0.077	19.332	1.00	30.26

	ATOM	1379	CG	LEU	1630	10.484	1.285	18.626	1.00	29.81
	ATOM	1380	CD1	LEU	1630	9.119	1.983	18.745	1.00	28.46
	ATOM	1381	CD2	LEU	1630	11.576	2.141	19.233	1.00	28.37
	ATOM	1382	C	LEU	1630	11.639	-2.242	19.904	1.00	29.32
	ATOM	1383	O	LEU	1630	11.414	-3.219	19.189	1.00	30.84
	ATOM	1384	N	VAL	1631	11.800	-2.342	21.221	1.00	28.90
	ATOM	1386	CA	VAL	1631	11.732	-3.629	21.905	1.00	26.84
5	ATOM	1387	CB	VAL	1631	13.067	-3.919	22.670	1.00	28.88
	ATOM	1388	CG1	VAL	1631	13.077	-5.341	23.236	1.00	21.54
	ATOM	1389	CG2	VAL	1631	14.259	-3.699	21.744	1.00	24.30
	ATOM	1390	C	VAL	1631	10.561	-3.645	22.881	1.00	29.02
	ATOM	1391	O	VAL	1631	10.406	-2.737	23.706	1.00	29.31
	ATOM	1392	N	THR	1632	9.733	-4.674	22.764	1.00	30.84
	ATOM	1394	CA	THR	1632	8.562	-4.830	23.616	1.00	32.24
	ATOM	1395	CB	THR	1632	7.488	-5.685	22.912	1.00	31.45
	ATOM	1396	OG1	THR	1632	7.896	-7.064	22.910	1.00	30.86
10	ATOM	1398	CG2	THR	1632	7.268	-5.194	21.470	1.00	28.04
	ATOM	1399	C	THR	1632	8.919	-5.493	24.943	1.00	34.17
	ATOM	1400	O	THR	1632	10.017	-6.019	25.105	1.00	35.02
	ATOM	1401	N	GLU	1633	7.959	-5.524	25.866	1.00	36.16
	ATOM	1403	CA	GLU	1633	8.155	-6.138	27.177	1.00	36.34
	ATOM	1404	CB	GLU	1633	6.865	-6.063	27.996	1.00	37.07
	ATOM	1405	CG	GLU	1633	6.957	-6.649	29.414	1.00	44.57
	ATOM	1406	CD	GLU	1633	8.035	-6.000	30.301	1.00	49.38
	ATOM	1407	OE1	GLU	1633	8.124	-4.753	30.352	1.00	51.03
15	ATOM	1408	OE2	GLU	1633	8.788	-6.750	30.968	1.00	51.63
	ATOM	1409	C	GLU	1633	8.600	-7.585	27.042	1.00	36.42
	ATOM	1410	O	GLU	1633	9.347	-8.085	27.874	1.00	38.56
	ATOM	1411	N	ASP	1634	8.185	-8.240	25.964	1.00	37.70
	ATOM	1413	CA	ASP	1634	8.550	-9.637	25.737	1.00	38.53
	ATOM	1414	CB	ASP	1634	7.408	-10.378	25.027	1.00	44.08
	ATOM	1415	CG	ASP	1634	6.041	-10.106	25.657	1.00	51.60
	ATOM	1416	OD1	ASP	1634	5.865	-10.367	26.867	1.00	52.37
	ATOM	1417	OD2	ASP	1634	5.137	-9.631	24.933	1.00	57.23
20	ATOM	1418	C	ASP	1634	9.826	-9.776	24.905	1.00	36.56
	ATOM	1419	O	ASP	1634	10.127	-10.865	24.430	1.00	36.74
	ATOM	1420	N	ASN	1635	10.569	-8.683	24.739	1.00	36.56
	ATOM	1422	CA	ASN	1635	11.819	-8.662	23.945	1.00	37.10
	ATOM	1423	CB	ASN	1635	12.888	-9.587	24.548	1.00	36.92
	ATOM	1424	CG	ASN	1635	13.226	-9.226	25.978	1.00	36.54
	ATOM	1425	OD1	ASN	1635	13.275	-8.058	26.340	1.00	38.84
	ATOM	1426	ND2	ASN	1635	13.423	-10.235	26.806	1.00	39.58
	ATOM	1429	C	ASN	1635	11.632	-8.980	22.451	1.00	34.78
25	ATOM	1430	O	ASN	1635	12.446	-9.677	21.834	1.00	34.00
	ATOM	1431	N	VAL	1636	10.533	-8.498	21.880	1.00	31.35
	ATOM	1433	CA	VAL	1636	10.279	-8.711	20.469	1.00	29.76
	ATOM	1434	CB	VAL	1636	8.778	-8.946	20.181	1.00	30.60
	ATOM	1435	CG1	VAL	1636	8.538	-9.081	18.675	1.00	30.38
	ATOM	1436	CG2	VAL	1636	8.315	-10.209	20.897	1.00	28.51
	ATOM	1437	C	VAL	1636	10.768	-7.449	19.781	1.00	28.02
	ATOM	1438	O	VAL	1636	10.506	-6.351	20.254	1.00	25.87
	ATOM	1439	N	MET	1637	11.575	-7.624	18.738	1.00	28.15
30	ATOM	1441	CA	MET	1637	12.119	-6.508	17.980	1.00	26.01
	ATOM	1442	CB	MET	1637	13.366	-6.953	17.204	1.00	27.82
	ATOM	1443	CG	MET	1637	14.479	-7.554	18.051	1.00	29.73
	ATOM	1444	SD	MET	1637	15.124	-6.410	19.288	1.00	29.96
	ATOM	1445	CE	MET	1637	15.120	-7.459	20.689	1.00	27.19
	ATOM	1446	C	MET	1637	11.040	-6.087	16.993	1.00	24.77
	ATOM	1447	O	MET	1637	10.480	-6.929	16.303	1.00	24.50
	ATOM	1448	N	LYS	1638	10.755	-4.791	16.931	1.00	25.74
	ATOM	1450	CA	LYS	1638	9.746	-4.258	16.029	1.00	23.67
35	ATOM	1451	CB	LYS	1638	8.486	-3.888	16.799	1.00	21.78
	ATOM	1452	CG	LYS	1638	7.715	-5.092	17.298	1.00	24.60
	ATOM	1453	CD	LYS	1638	6.406	-4.683	18.005	1.00	23.87
	ATOM	1454	CE	LYS	1638	5.486	-5.897	18.256	1.00	23.06
	ATOM	1455	NZ	LYS	1638	4.871	-6.398	16.976	1.00	24.60

	ATOM	1459	C	LYS	1638	10.260	-3.042	15.293	1.00	24.37
	ATOM	1460	O	LYS	1638	10.658	-2.055	15.901	1.00	26.58
	ATOM	1461	N	ILE	1639	10.271	-3.119	13.971	1.00	25.69
	ATOM	1463	CA	ILE	1639	10.721	-2.005	13.148	1.00	25.94
	ATOM	1464	CB	ILE	1639	10.935	-2.447	11.668	1.00	26.49
	ATOM	1465	CG2	ILE	1639	11.218	-1.236	10.762	1.00	21.19
	ATOM	1466	CG1	ILE	1639	12.103	-3.433	11.604	1.00	27.58
5	ATOM	1467	CD1	ILE	1639	12.120	-4.232	10.355	1.00	32.96
	ATOM	1468	C	ILE	1639	9.675	-0.892	13.242	1.00	27.32
	ATOM	1469	O	ILE	1639	8.466	-1.133	13.103	1.00	25.45
	ATOM	1470	N	ALA	1640	10.156	0.320	13.498	1.00	27.43
	ATOM	1472	CA	ALA	1640	9.321	1.499	13.632	1.00	26.96
	ATOM	1473	CB	ALA	1640	9.557	2.133	15.006	1.00	25.21
	ATOM	1474	C	ALA	1640	9.641	2.510	12.538	1.00	26.80
	ATOM	1475	O	ALA	1640	10.691	2.446	11.896	1.00	27.55
	ATOM	1476	N	ASP	1641	8.716	3.440	12.328	1.00	27.06
10	ATOM	1478	CA	ASP	1641	8.862	4.526	11.349	1.00	30.54
	ATOM	1479	CB	ASP	1641	9.993	5.484	11.753	1.00	33.12
	ATOM	1480	CG	ASP	1641	9.668	6.310	12.999	1.00	36.17
	ATOM	1481	OD1	ASP	1641	10.477	7.203	13.334	1.00	42.24
	ATOM	1482	OD2	ASP	1641	8.633	6.076	13.648	1.00	33.22
	ATOM	1483	C	ASP	1641	9.049	4.107	9.898	1.00	29.94
	ATOM	1484	O	ASP	1641	9.598	4.861	9.102	1.00	30.13
	ATOM	1485	N	PHE	1642	8.569	2.920	9.553	1.00	30.22
	ATOM	1487	CA	PHE	1642	8.680	2.426	8.191	1.00	30.91
15	ATOM	1488	CB	PHE	1642	8.462	0.909	8.159	1.00	26.24
	ATOM	1489	CG	PHE	1642	7.156	0.470	8.750	1.00	27.82
	ATOM	1490	CD1	PHE	1642	5.986	0.495	7.988	1.00	27.08
	ATOM	1491	CD2	PHE	1642	7.089	0.026	10.066	1.00	26.70
	ATOM	1492	CE1	PHE	1642	4.761	0.068	8.532	1.00	25.18
	ATOM	1493	CE2	PHE	1642	5.872	-0.383	10.624	1.00	27.59
	ATOM	1494	CZ	PHE	1642	4.705	-0.354	9.855	1.00	28.05
	ATOM	1495	C	PHE	1642	7.729	3.139	7.219	1.00	33.35
	ATOM	1496	O	PHE	1642	7.983	3.165	6.018	1.00	36.19
20	ATOM	1497	N	GLY	1643	6.661	3.746	7.736	1.00	32.76
	ATOM	1499	CA	GLY	1643	5.710	4.419	6.863	1.00	31.44
	ATOM	1500	C	GLY	1643	5.805	5.927	6.910	1.00	32.94
	ATOM	1501	O	GLY	1643	4.945	6.636	6.399	1.00	33.10
	ATOM	1502	N	LEU	1644	6.872	6.407	7.525	1.00	35.45
	ATOM	1504	CA	LEU	1644	7.124	7.828	7.684	1.00	39.04
	ATOM	1505	CB	LEU	1644	8.387	8.011	8.514	1.00	37.80
	ATOM	1506	CG	LEU	1644	8.414	9.120	9.549	1.00	42.51
	ATOM	1507	CD1	LEU	1644	7.301	8.887	10.563	1.00	44.08
25	ATOM	1508	CD2	LEU	1644	9.779	9.127	10.243	1.00	44.47
	ATOM	1509	C	LEU	1644	7.259	8.580	6.357	1.00	42.20
	ATOM	1510	O	LEU	1644	7.895	8.107	5.414	1.00	44.14
	ATOM	1511	N	ALA	1645	6.607	9.732	6.267	1.00	43.89
	ATOM	1513	CA	ALA	1645	6.677	10.569	5.082	1.00	45.62
	ATOM	1514	CB	ALA	1645	5.463	11.493	5.028	1.00	45.06
	ATOM	1515	C	ALA	1645	7.966	11.388	5.186	1.00	45.82
	ATOM	1516	O	ALA	1645	8.240	11.994	6.228	1.00	45.85
	ATOM	1517	N	ARG	1646	8.766	11.389	4.129	1.00	45.16
30	ATOM	1519	CA	ARG	1646	10.015	12.140	4.138	1.00	47.06
	ATOM	1520	CB	ARG	1646	11.126	11.318	4.794	1.00	48.00
	ATOM	1521	C	ARG	1646	10.445	12.546	2.742	1.00	46.83
	ATOM	1522	O	ARG	1646	10.429	11.729	1.823	1.00	45.76
	ATOM	1523	N	ASP	1647	10.807	13.814	2.578	1.00	48.96
	ATOM	1525	CA	ASP	1647	11.278	14.291	1.288	1.00	50.93
	ATOM	1526	CB	ASP	1647	10.938	15.769	1.073	1.00	52.33
	ATOM	1527	CG	ASP	1647	11.191	16.228	-0.360	1.00	55.93
	ATOM	1528	OD1	ASP	1647	12.231	15.850	-0.956	1.00	52.58
35	ATOM	1529	OD2	ASP	1647	10.340	16.980	-0.896	1.00	59.54
	ATOM	1530	C	ASP	1647	12.789	14.104	1.336	1.00	50.78
	ATOM	1531	O	ASP	1647	13.491	14.803	2.077	1.00	48.32
	ATOM	1532	N	ILE	1648	13.274	13.144	0.556	1.00	50.84
	ATOM	1534	CA	ILE	1648	14.696	12.833	0.516	1.00	52.58

	ATOM	1535	CB	ILE	1648	14.984	11.571	-0.324	1.00	50.85
	ATOM	1536	CG2	ILE	1648	14.204	10.386	0.241	1.00	49.34
	ATOM	1537	CG1	ILE	1648	14.638	11.813	-1.801	1.00	48.22
	ATOM	1538	CD1	ILE	1648	15.233	10.806	-2.754	1.00	42.86
	ATOM	1539	C	ILE	1648	15.523	13.999	-0.018	1.00	55.57
	ATOM	1540	O	ILE	1648	16.648	14.222	0.423	1.00	57.24
5	ATOM	1541	N	HIS	1649	14.944	14.766	-0.936	1.00	56.80
	ATOM	1543	CA	HIS	1649	15.650	15.895	-1.520	1.00	58.03
	ATOM	1544	CB	HIS	1649	15.013	16.302	-2.859	1.00	58.71
	ATOM	1545	CG	HIS	1649	15.221	15.308	-3.958	1.00	60.28
	ATOM	1546	CD2	HIS	1649	16.303	14.566	-4.306	1.00	60.74
	ATOM	1547	ND1	HIS	1649	14.241	14.986	-4.874	1.00	61.70
	ATOM	1549	CE1	HIS	1649	14.708	14.104	-5.742	1.00	61.86
	ATOM	1550	NE2	HIS	1649	15.959	13.833	-5.417	1.00	60.98
	ATOM	1552	C	HIS	1649	15.721	17.093	-0.591	1.00	58.49
	ATOM	1553	O	HIS	1649	16.129	18.175	-1.004	1.00	60.56
10	ATOM	1554	N	HIS	1650	15.285	16.916	0.654	1.00	59.58
	ATOM	1556	CA	HIS	1650	15.306	18.001	1.635	1.00	61.38
	ATOM	1557	CB	HIS	1650	15.898	18.540	1.863	1.00	65.28
	ATOM	1558	CG	HIS	1650	13.404	19.433	0.738	1.00	72.62
	ATOM	1559	CD2	HIS	1650	13.492	20.752	0.536	1.00	76.23
	ATOM	1560	ND1	HIS	1650	12.710	18.904	-0.339	1.00	77.05
	ATOM	1562	CE1	HIS	1650	12.402	19.907	-1.157	1.00	78.51
	ATOM	1563	NE2	HIS	1650	12.863	21.015	-0.647	1.00	78.82
	ATOM	1565	C	HIS	1650	15.925	17.575	2.972	1.00	60.63
15	ATOM	1566	O	HIS	1650	15.796	18.271	3.969	1.00	60.20
	ATOM	1567	N	ILE	1651	16.584	16.419	2.987	1.00	60.22
	ATOM	1569	CA	ILE	1651	17.197	15.920	4.204	1.00	60.03
	ATOM	1570	CB	ILE	1651	17.574	14.434	4.069	1.00	62.54
	ATOM	1571	CG2	ILE	1651	18.280	13.920	5.323	1.00	63.48
	ATOM	1572	CG1	ILE	1651	16.329	13.584	3.800	1.00	65.18
	ATOM	1573	CD1	ILE	1651	16.635	12.124	3.603	1.00	67.18
	ATOM	1574	C	ILE	1651	18.457	16.698	4.557	1.00	59.16
	ATOM	1575	O	ILE	1651	19.326	16.907	3.716	1.00	59.25
20	ATOM	1576	N	ASP	1652	18.532	17.176	5.793	1.00	58.91
	ATOM	1578	CA	ASP	1652	19.702	17.915	6.260	1.00	58.25
	ATOM	1579	CB	ASP	1652	19.312	18.788	7.444	1.00	61.14
	ATOM	1580	CG	ASP	1652	20.506	19.569	8.028	1.00	65.33
	ATOM	1581	OD1	ASP	1652	21.614	19.574	7.411	1.00	67.11
	ATOM	1582	OD2	ASP	1652	20.337	20.191	9.126	1.00	69.04
	ATOM	1583	C	ASP	1652	20.786	16.922	6.676	1.00	56.75
	ATOM	1584	O	ASP	1652	20.699	16.307	7.741	1.00	56.06
	ATOM	1585	N	TYR	1653	21.794	16.762	5.826	1.00	55.40
25	ATOM	1587	CA	TYR	1653	22.900	15.849	6.088	1.00	54.50
	ATOM	1588	CB	TYR	1653	23.825	15.783	4.872	1.00	52.80
	ATOM	1589	CG	TYR	1653	23.334	14.854	3.796	1.00	52.10
	ATOM	1590	CD1	TYR	1653	24.123	14.566	2.685	1.00	51.50
	ATOM	1591	CE1	TYR	1653	23.701	13.658	1.724	1.00	53.52
	ATOM	1592	CD2	TYR	1653	22.099	14.214	3.917	1.00	52.88
	ATOM	1593	CE2	TYR	1653	21.664	13.302	2.966	1.00	54.63
	ATOM	1594	CZ	TYR	1653	22.469	13.025	1.870	1.00	54.35
	ATOM	1595	OH	TYR	1653	22.049	12.107	0.933	1.00	53.23
30	ATOM	1597	C	TYR	1653	23.717	16.158	7.339	1.00	55.40
	ATOM	1598	O	TYR	1653	24.381	15.284	7.900	1.00	54.47
	ATOM	1599	N	TYR	1654	23.673	17.409	7.773	1.00	56.72
	ATOM	1601	CA	TYR	1654	24.421	17.826	8.947	1.00	58.87
	ATOM	1602	CB	TYR	1654	24.978	19.235	8.733	1.00	57.91
	ATOM	1603	CG	TYR	1654	26.068	19.269	7.685	1.00	60.49
	ATOM	1604	CD1	TYR	1654	25.760	19.301	6.325	1.00	61.37
	ATOM	1605	CE1	TYR	1654	26.769	19.289	5.356	1.00	63.72
	ATOM	1606	CD2	TYR	1654	27.412	19.227	8.053	1.00	61.74
35	ATOM	1607	CE2	TYR	1654	28.425	19.216	7.099	1.00	64.08
	ATOM	1608	CZ	TYR	1654	28.102	19.248	5.753	1.00	65.12
	ATOM	1609	OH	TYR	1654	29.117	19.248	4.817	1.00	64.17
	ATOM	1611	C	TYR	1654	23.628	17.732	10.245	1.00	60.17
	ATOM	1612	O	TYR	1654	24.173	17.935	11.335	1.00	61.09

	ATOM	1613	N	LYS	1655	22.348	17.393	10.133	1.00	60.54
	ATOM	1615	CA	LYS	1655	21.493	17.277	11.306	1.00	62.12
	ATOM	1616	CB	LYS	1655	20.019	17.382	10.910	1.00	64.32
	ATOM	1617	CG	LYS	1655	19.054	17.346	12.079	1.00	67.17
	ATOM	1618	CD	LYS	1655	17.644	17.608	11.602	1.00	73.05
	ATOM	1619	CE	LYS	1655	16.626	17.243	12.660	1.00	77.36
	ATOM	1620	NZ	LYS	1655	15.230	17.494	12.186	1.00	81.10
5	ATOM	1624	C	LYS	1655	21.754	15.976	12.057	1.00	62.19
	ATOM	1625	O	LYS	1655	21.902	14.907	11.454	1.00	61.36
	ATOM	1626	N	LYS	1656	21.822	16.084	13.380	1.00	62.26
	ATOM	1628	CA	LYS	1656	22.069	14.933	14.236	1.00	62.28
	ATOM	1629	CB	LYS	1656	23.027	15.310	15.372	1.00	62.05
	ATOM	1630	CG	LYS	1656	24.474	15.489	14.957	1.00	62.62
	ATOM	1631	CD	LYS	1656	25.320	15.889	16.157	1.00	66.45
	ATOM	1632	CE	LYS	1656	26.803	15.666	15.908	1.00	67.28
	ATOM	1633	NZ	LYS	1656	27.619	16.007	17.109	1.00	68.45
10	ATOM	1637	C	LYS	1656	20.774	14.381	14.824	1.00	61.86
	ATOM	1638	O	LYS	1656	19.714	15.007	14.733	1.00	62.95
	ATOM	1639	N	THR	1657	20.875	13.198	15.420	1.00	60.10
	ATOM	1641	CA	THR	1657	19.743	12.541	16.053	1.00	57.73
	ATOM	1642	CB	THR	1657	19.973	11.012	16.121	1.00	56.04
	ATOM	1643	OG1	THR	1657	21.150	10.730	16.896	1.00	55.21
	ATOM	1645	CG2	THR	1657	20.152	10.431	14.731	1.00	53.07
	ATOM	1646	C	THR	1657	19.664	13.102	17.472	1.00	57.74
	ATOM	1647	O	THR	1657	20.513	13.899	17.870	1.00	57.76
15	ATOM	1648	N	THR	1658	18.678	12.667	18.249	1.00	58.80
	ATOM	1650	CA	THR	1658	18.548	13.140	19.627	1.00	60.33
	ATOM	1651	CB	THR	1658	17.318	12.517	20.290	1.00	61.37
	ATOM	1652	C	THR	1658	19.811	12.779	20.406	1.00	60.43
	ATOM	1653	O	THR	1658	20.350	13.599	21.155	1.00	60.59
	ATOM	1654	N	ASN	1659	20.311	11.567	20.161	1.00	59.97
	ATOM	1656	CA	ASN	1659	21.508	11.058	20.827	1.00	58.28
	ATOM	1657	CB	ASN	1659	21.607	9.545	20.645	1.00	59.95
	ATOM	1658	CG	ASN	1659	22.444	8.883	21.723	1.00	60.10
20	ATOM	1659	OD1	ASN	1659	22.382	9.265	22.891	1.00	61.26
	ATOM	1660	ND2	ASN	1659	23.210	7.867	21.341	1.00	57.09
	ATOM	1663	C	ASN	1659	22.781	11.717	20.311	1.00	57.13
	ATOM	1664	O	ASN	1659	23.868	11.418	20.793	1.00	57.34
	ATOM	1665	N	GLY	1660	22.643	12.570	19.299	1.00	56.48
	ATOM	1667	CA	GLY	1660	23.781	13.276	18.733	1.00	54.87
	ATOM	1668	C	GLY	1660	24.539	12.570	17.623	1.00	53.04
	ATOM	1669	O	GLY	1660	25.716	12.855	17.394	1.00	54.11
	ATOM	1670	N	ARG	1661	23.879	11.659	16.918	1.00	51.37
25	ATOM	1672	CA	ARG	1661	24.536	10.930	15.833	1.00	48.96
	ATOM	1673	CB	ARG	1661	24.283	9.428	15.961	1.00	48.48
	ATOM	1674	CG	ARG	1661	24.848	8.796	17.215	1.00	50.03
	ATOM	1675	CD	ARG	1661	24.492	7.325	17.234	1.00	50.78
	ATOM	1676	NE	ARG	1661	25.013	6.614	18.396	1.00	50.11
	ATOM	1678	CZ	ARG	1661	24.902	5.299	18.566	1.00	50.08
	ATOM	1679	NH1	ARG	1661	24.286	4.560	17.645	1.00	46.57
	ATOM	1682	NH2	ARG	1661	25.426	4.717	19.643	1.00	47.88
	ATOM	1685	C	ARG	1661	24.076	11.422	14.459	1.00	46.53
30	ATOM	1686	O	ARG	1661	23.031	12.029	14.325	1.00	45.01
	ATOM	1687	N	LEU	1662	24.839	11.094	13.432	1.00	42.39
	ATOM	1689	CA	LEU	1662	24.546	11.503	12.076	1.00	40.71
	ATOM	1690	CB	LEU	1662	25.823	12.031	11.399	1.00	40.25
	ATOM	1691	CG	LEU	1662	26.408	13.332	11.965	1.00	42.44
	ATOM	1692	CD1	LEU	1662	27.853	13.478	11.537	1.00	40.42
	ATOM	1693	CD2	LEU	1662	25.591	14.536	11.514	1.00	41.16
	ATOM	1694	C	LEU	1662	23.946	10.362	11.258	1.00	38.45
	ATOM	1695	O	LEU	1662	24.647	9.436	10.862	1.00	36.67
35	ATOM	1696	N	PRO	1663	22.632	10.428	10.987	1.00	37.09
	ATOM	1697	CD	PRO	1663	21.717	11.475	11.489	1.00	38.18
	ATOM	1698	CA	PRO	1663	21.894	9.424	10.207	1.00	35.59
	ATOM	1699	CB	PRO	1663	20.535	10.098	9.983	1.00	35.90
	ATOM	1700	CG	PRO	1663	20.343	10.856	11.258	1.00	39.13

	ATOM	1701	C	PRO	1663	22.556	9.045	8.876	1.00	33.05
	ATOM	1702	O	PRO	1663	22.362	7.933	8.378	1.00	31.16
	ATOM	1703	N	VAL	1664	23.333	9.960	8.299	1.00	32.07
	ATOM	1705	CA	VAL	1664	24.020	9.669	7.034	1.00	32.49
	ATOM	1706	CB	VAL	1664	24.831	10.886	6.477	1.00	32.68
	ATOM	1707	CG1	VAL	1664	23.898	11.906	5.864	1.00	32.25
	ATOM	1708	CG2	VAL	1664	25.670	11.523	7.571	1.00	33.22
5	ATOM	1709	C	VAL	1664	24.957	8.469	7.171	1.00	29.57
	ATOM	1710	O	VAL	1664	25.328	7.864	6.175	1.00	27.39
	ATOM	1711	N	LYS	1665	25.303	8.116	8.409	1.00	28.82
	ATOM	1713	CA	LYS	1665	26.189	6.991	8.673	1.00	27.87
	ATOM	1714	CB	LYS	1665	26.815	7.100	10.065	1.00	26.99
	ATOM	1715	CG	LYS	1665	27.967	8.089	10.079	1.00	29.23
	ATOM	1716	CD	LYS	1665	28.283	8.619	11.466	1.00	30.64
	ATOM	1717	CE	LYS	1665	29.543	9.478	11.426	1.00	30.94
	ATOM	1718	NZ	LYS	1665	29.826	10.128	12.737	1.00	31.63
10	ATOM	1722	C	LYS	1665	25.546	5.637	8.465	1.00	26.76
	ATOM	1723	O	LYS	1665	26.211	4.615	8.589	1.00	26.78
	ATOM	1724	N	TRP	1666	24.260	5.630	8.137	1.00	25.79
	ATOM	1726	CA	TRP	1666	23.561	4.381	7.865	1.00	26.56
	ATOM	1727	CB	TRP	1666	22.299	4.273	8.724	1.00	25.63
	ATOM	1728	CG	TRP	1666	22.564	3.872	10.174	1.00	26.95
	ATOM	1729	CD2	TRP	1666	23.052	4.717	11.232	1.00	24.83
	ATOM	1730	CE2	TRP	1666	23.134	3.920	12.398	1.00	24.49
	ATOM	1731	CE3	TRP	1666	23.433	6.062	11.306	1.00	24.54
15	ATOM	1732	CD1	TRP	1666	22.376	2.636	10.730	1.00	20.10
	ATOM	1733	NE1	TRP	1666	22.716	2.660	12.063	1.00	21.86
	ATOM	1735	CZ2	TRP	1666	23.575	4.433	13.627	1.00	25.71
	ATOM	1736	CZ3	TRP	1666	23.870	6.569	12.523	1.00	26.00
	ATOM	1737	CH2	TRP	1666	23.939	5.754	13.665	1.00	26.04
	ATOM	1738	C	TRP	1666	23.188	4.263	6.386	1.00	23.62
	ATOM	1739	O	TRP	1666	22.754	3.214	5.931	1.00	24.87
	ATOM	1740	N	MET	1667	23.404	5.330	5.631	1.00	22.78
	ATOM	1742	CA	MET	1667	23.046	5.361	4.215	1.00	23.73
20	ATOM	1743	CB	MET	1667	22.894	6.802	3.744	1.00	26.24
	ATOM	1744	CG	MET	1667	21.823	7.621	4.434	1.00	35.55
	ATOM	1745	SD	MET	1667	21.795	9.276	3.706	1.00	42.23
	ATOM	1746	CE	MET	1667	21.019	8.904	2.238	1.00	40.57
	ATOM	1747	C	MET	1667	23.991	4.693	3.239	1.00	22.77
	ATOM	1748	O	MET	1667	25.205	4.894	3.294	1.00	24.25
	ATOM	1749	N	ALA	1668	23.420	3.963	2.286	1.00	22.73
	ATOM	1751	CA	ALA	1668	24.217	3.337	1.237	1.00	23.54
	ATOM	1752	CB	ALA	1668	23.339	2.495	0.340	1.00	21.80
25	ATOM	1753	C	ALA	1668	24.805	4.495	0.430	1.00	25.53
	ATOM	1754	O	ALA	1668	24.181	5.551	0.316	1.00	23.66
	ATOM	1755	N	PRO	1669	26.006	4.314	-0.153	1.00	26.86
	ATOM	1756	CD	PRO	1669	26.899	3.144	-0.095	1.00	26.35
	ATOM	1757	CA	PRO	1669	26.611	5.390	-0.942	1.00	27.78
	ATOM	1758	CB	PRO	1669	27.864	4.731	-1.518	1.00	25.51
	ATOM	1759	CG	PRO	1669	28.225	3.741	-0.471	1.00	25.36
	ATOM	1760	C	PRO	1669	25.686	5.900	-2.057	1.00	26.47
	ATOM	1761	O	PRO	1669	25.617	7.099	-2.288	1.00	28.42
30	ATOM	1762	N	GLU	1670	24.951	5.010	-2.724	1.00	26.88
	ATOM	1764	CA	GLU	1670	24.057	5.459	-3.796	1.00	29.03
	ATOM	1765	CB	GLU	1670	23.597	4.293	-4.693	1.00	31.79
	ATOM	1766	CG	GLU	1670	22.588	3.325	-4.065	1.00	32.47
	ATOM	1767	CD	GLU	1670	23.212	2.184	-3.255	1.00	32.43
	ATOM	1768	OE1	GLU	1670	22.429	1.297	-2.822	1.00	25.01
	ATOM	1769	OE2	GLU	1670	24.458	2.157	-3.069	1.00	28.75
	ATOM	1770	C	GLU	1670	22.864	6.274	-3.294	1.00	28.37
	ATOM	1771	O	GLU	1670	22.358	7.146	-4.001	1.00	25.72
35	ATOM	1772	N	ALA	1671	22.451	6.028	-2.053	1.00	30.08
	ATOM	1774	CA	ALA	1671	21.347	6.779	-1.465	1.00	31.24
	ATOM	1775	CB	ALA	1671	20.751	6.031	-0.287	1.00	26.42
	ATOM	1776	C	ALA	1671	21.899	8.125	-1.013	1.00	31.36
	ATOM	1777	O	ALA	1671	21.298	9.167	-1.249	1.00	33.11

	ATOM	1778	N	LEU	1672	23.068	8.096	-0.387	1.00	32.73
	ATOM	1780	CA	LEU	1672	23.715	9.304	0.100	1.00	33.96
	ATOM	1781	CB	LEU	1672	24.931	8.935	0.940	1.00	33.89
	ATOM	1782	CG	LEU	1672	25.783	10.071	1.502	1.00	37.62
	ATOM	1783	CD1	LEU	1672	25.010	10.800	2.581	1.00	39.57
	ATOM	1784	CD2	LEU	1672	27.054	9.491	2.087	1.00	32.30
	ATOM	1785	C	LEU	1672	24.157	10.207	-1.042	1.00	36.83
5	ATOM	1786	O	LEU	1672	23.769	11.369	-1.102	1.00	37.87
	ATOM	1787	N	PHE	1673	24.959	9.669	-1.954	1.00	35.82
	ATOM	1789	CA	PHE	1673	25.466	10.449	-3.071	1.00	35.82
	ATOM	1790	CB	PHE	1673	26.738	9.802	-3.639	1.00	34.66
	ATOM	1791	CG	PHE	1673	27.850	9.642	-2.634	1.00	33.84
	ATOM	1792	CD1	PHE	1673	28.503	8.422	-2.494	1.00	32.65
	ATOM	1793	CD2	PHE	1673	28.242	10.709	-1.827	1.00	36.98
	ATOM	1794	CE1	PHE	1673	29.540	8.257	-1.555	1.00	37.95
	ATOM	1795	CE2	PHE	1673	29.279	10.557	-0.881	1.00	39.90
10	ATOM	1796	CZ	PHE	1673	29.927	9.325	-0.748	1.00	37.09
	ATOM	1797	C	PHE	1673	24.483	10.692	-4.210	1.00	36.34
	ATOM	1798	O	PHE	1673	24.430	11.788	-4.754	1.00	37.18
	ATOM	1799	N	ASP	1674	23.705	9.677	-4.568	1.00	38.22
	ATOM	1801	CA	ASP	1674	22.780	9.777	-5.693	1.00	38.51
	ATOM	1802	CB	ASP	1674	23.008	8.597	-6.633	1.00	40.34
	ATOM	1803	CG	ASP	1674	24.439	8.511	-7.122	1.00	43.87
	ATOM	1804	OD1	ASP	1674	25.092	9.571	-7.254	1.00	42.79
	ATOM	1805	OD2	ASP	1674	24.906	7.376	-7.369	1.00	47.94
15	ATOM	1806	C	ASP	1674	21.298	9.853	-5.360	1.00	40.21
	ATOM	1807	O	ASP	1674	20.457	9.872	-6.271	1.00	39.07
	ATOM	1808	N	ARG	1675	20.975	9.836	-4.072	1.00	39.83
	ATOM	1810	CA	ARG	1675	19.589	9.500	-3.631	1.00	42.25
	ATOM	1811	CB	ARG	1675	18.992	11.271	-3.964	1.00	48.19
	ATOM	1812	CG	ARG	1675	19.691	12.420	-3.267	1.00	59.20
	ATOM	1813	CD	ARG	1675	19.462	13.729	-4.019	1.00	67.81
	ATOM	1814	NE	ARG	1675	20.079	14.876	-3.352	1.00	75.11
	ATOM	1816	CZ	ARG	1675	19.688	16.136	-3.525	1.00	78.74
20	ATOM	1817	NH1	ARG	1675	18.680	16.429	-4.341	1.00	79.91
	ATOM	1820	NH2	ARG	1675	20.311	17.115	-2.890	1.00	81.24
	ATOM	1823	C	ARG	1675	18.730	8.777	-4.221	1.00	39.00
	ATOM	1824	O	ARG	1675	17.544	8.956	-4.488	1.00	39.71
	ATOM	1825	N	ILE	1676	19.345	7.624	-4.434	1.00	35.50
	ATOM	1827	CA	ILE	1676	18.636	6.471	-4.958	1.00	33.51
	ATOM	1828	CB	ILE	1676	19.434	5.759	-6.039	1.00	34.59
	ATOM	1829	CG2	ILE	1676	18.582	4.678	-6.649	1.00	33.90
	ATOM	1830	CG1	ILE	1676	19.848	6.752	-7.120	1.00	37.60
25	ATOM	1831	CD1	ILE	1676	20.861	6.197	-8.109	1.00	42.67
	ATOM	1832	C	ILE	1676	18.390	5.501	-3.809	1.00	30.94
	ATOM	1833	O	ILE	1676	19.326	4.926	-3.252	1.00	28.62
	ATOM	1834	N	TYR	1677	17.124	5.351	-3.443	1.00	30.60
	ATOM	1836	CA	TYR	1677	16.724	4.467	-2.359	1.00	25.87
	ATOM	1837	CB	TYR	1677	15.781	5.197	-1.413	1.00	26.40
	ATOM	1838	CG	TYR	1677	16.483	6.220	-0.555	1.00	27.67
	ATOM	1839	CD1	TYR	1677	16.663	7.533	-0.999	1.00	27.45
	ATOM	1840	CE1	TYR	1677	17.269	8.483	-0.191	1.00	26.55
30	ATOM	1841	CD2	TYR	1677	16.935	5.883	0.721	1.00	24.58
	ATOM	1842	CE2	TYR	1677	17.536	6.828	1.538	1.00	26.35
	ATOM	1843	CZ	TYR	1677	17.698	8.122	1.080	1.00	28.80
	ATOM	1844	OH	TYR	1677	18.270	9.059	1.914	1.00	34.97
	ATOM	1846	C	TYR	1677	16.055	3.235	-2.911	1.00	22.70
	ATOM	1847	O	TYR	1677	15.144	3.335	-3.728	1.00	26.22
	ATOM	1848	N	THR	1678	16.477	2.076	-2.420	1.00	21.83
	ATOM	1850	CA	THR	1678	15.968	0.791	-2.865	1.00	22.14
	ATOM	1851	CB	THR	1678	16.907	0.191	-3.928	1.00	23.91
35	ATOM	1852	OG1	THR	1678	18.229	0.105	-3.373	1.00	27.47
	ATOM	1854	CG2	THR	1678	16.949	1.053	-5.188	1.00	24.94
	ATOM	1855	C	THR	1678	15.999	-0.176	-1.692	1.00	22.79
	ATOM	1856	O	THR	1678	16.427	0.170	-0.592	1.00	23.39
	ATOM	1857	N	HIS	1679	15.563	-1.402	-1.929	1.00	21.98

	ATOM	1859	CA	HIS	1679	15.613	-2.417	-0.888	1.00	22.97
	ATOM	1860	CB	HIS	1679	14.872	-3.671	-1.351	1.00	22.04
	ATOM	1861	CG	HIS	1679	13.421	-3.444	-1.621	1.00	25.41
	ATOM	1862	CD2	HIS	1679	12.674	-3.611	-2.740	1.00	26.60
	ATOM	1863	ND1	HIS	1679	12.556	-2.954	-0.663	1.00	26.13
	ATOM	1865	CE1	HIS	1679	11.348	-2.830	-1.178	1.00	28.66
	ATOM	1866	NE2	HIS	1679	11.394	-3.221	-2.441	1.00	29.66
5	ATOM	1868	C	HIS	1679	17.097	-2.719	-0.650	1.00	23.14
	ATOM	1869	O	HIS	1679	17.511	-3.074	0.459	1.00	21.69
	ATOM	1870	N	GLN	1680	17.895	-2.506	-1.697	1.00	22.38
	ATOM	1872	CA	GLN	1680	19.335	-2.726	-1.658	1.00	22.33
	ATOM	1873	CB	GLN	1680	19.948	-2.594	-3.058	1.00	22.52
	ATOM	1874	CG	GLN	1680	19.895	-3.872	-3.879	1.00	29.15
	ATOM	1875	CD	GLN	1680	18.865	-3.847	-4.991	1.00	33.60
	ATOM	1876	OE1	GLN	1680	17.819	-3.212	-4.871	1.00	38.43
	ATOM	1877	NE2	GLN	1680	19.159	-4.542	-6.085	1.00	33.44
10	ATOM	1880	C	GLN	1680	20.007	-1.740	-0.732	1.00	22.61
	ATOM	1881	O	GLN	1680	20.943	-2.093	-0.027	1.00	22.00
	ATOM	1882	N	SER	1681	19.562	-0.490	-0.745	1.00	22.06
	ATOM	1884	CA	SER	1681	20.184	0.479	0.137	1.00	23.41
	ATCM	1885	CB	SER	1681	19.886	1.923	-0.306	1.00	20.06
	ATOM	1886	OG	SER	1681	18.503	2.166	-0.479	1.00	22.90
	ATOM	1888	C	SER	1681	19.778	0.206	1.583	1.00	23.08
	ATOM	1889	O	SER	1681	20.528	0.531	2.506	1.00	24.13
	ATOM	1890	N	ASP	1682	18.608	-0.412	1.770	1.00	23.19
15	ATOM	1892	CA	ASP	1682	18.107	-0.775	3.104	1.00	22.37
	ATOM	1893	CB	ASP	1682	16.660	-1.275	3.018	1.00	24.55
	ATOM	1894	CG	ASP	1682	15.616	-0.172	3.222	1.00	24.22
	ATOM	1895	OD1	ASP	1682	14.428	-0.479	3.005	1.00	25.02
	ATOM	1896	OD2	ASP	1682	15.949	0.969	3.625	1.00	24.92
	ATOM	1897	C	ASP	1682	18.980	-1.888	3.690	1.00	20.47
	ATOM	1898	O	ASP	1682	19.172	-1.984	4.906	1.00	21.83
	ATOM	1899	N	VAL	1683	19.480	-2.746	2.806	1.00	20.14
	ATOM	1901	CA	VAL	1683	20.340	-3.856	3.179	1.00	20.49
20	ATOM	1902	CB	VAL	1683	20.493	-4.842	2.003	1.00	22.38
	ATOM	1903	CG1	VAL	1683	21.757	-5.691	2.159	1.00	19.57
	ATOM	1904	CG2	VAL	1683	19.264	-5.740	1.942	1.00	22.35
	ATOM	1905	C	VAL	1683	21.677	-3.315	3.683	1.00	20.22
	ATOM	1906	O	VAL	1683	22.202	-3.789	4.684	1.00	21.41
	ATOM	1907	N	TRP	1684	22.210	-2.311	3.003	1.00	21.33
	ATOM	1909	CA	TRP	1684	23.440	-1.656	3.449	1.00	22.21
	ATOM	1910	CB	TRP	1684	23.768	-0.473	2.540	1.00	18.78
	ATOM	1911	CG	TRP	1684	24.924	0.391	3.037	1.00	22.80
25	ATOM	1912	CD2	TRP	1684	26.237	0.477	2.472	1.00	24.60
	ATOM	1913	CE2	TRP	1684	26.989	1.364	3.286	1.00	24.34
	ATOM	1914	CE3	TRP	1684	26.853	-0.099	1.352	1.00	24.32
	ATOM	1915	CD1	TRP	1684	24.933	1.208	4.138	1.00	22.28
	ATOM	1916	NE1	TRP	1684	26.169	1.791	4.297	1.00	22.32
	ATOM	1918	CZ2	TRP	1684	28.324	1.669	3.022	1.00	24.77
	ATOM	1919	CZ3	TRP	1684	28.193	0.213	1.090	1.00	24.46
	ATOM	1920	CH2	TRP	1684	28.906	1.088	1.918	1.00	24.00
	ATOM	1921	C	TRP	1684	23.198	-1.183	4.899	1.00	23.26
30	ATOM	1922	O	TRP	1684	23.982	-1.475	5.805	1.00	24.52
	ATOM	1923	N	SER	1685	22.108	-0.447	5.113	1.00	22.88
	ATOM	1925	CA	SER	1685	21.744	0.057	6.444	1.00	24.01
	ATOM	1926	CB	SER	1685	20.398	0.783	6.385	1.00	21.90
	ATOM	1927	OG	SER	1685	20.424	1.787	5.388	1.00	24.75
	ATOM	1929	C	SER	1685	21.659	-1.087	7.464	1.00	24.28
	ATOM	1930	O	SER	1685	22.077	-0.933	8.625	1.00	23.94
	ATOM	1931	N	PHE	1686	21.099	-2.221	7.037	1.00	23.20
	ATOM	1933	CA	PHE	1686	20.993	-3.393	7.898	1.00	23.87
35	ATOM	1934	CB	PHE	1686	20.216	-4.519	7.216	1.00	19.56
	ATOM	1935	CG	PHE	1686	20.062	-5.734	8.075	1.00	22.19
	ATOM	1936	CD1	PHE	1686	19.240	-5.701	9.203	1.00	21.55
	ATOM	1937	CD2	PHE	1686	20.773	-6.899	7.793	1.00	21.94
	ATOM	1938	CE1	PHE	1686	19.125	-6.801	10.033	1.00	21.66

	ATOM	1939	CE2	PHE	1686	20.663	-8.012	8.623	1.00	22.47
	ATOM	1940	CZ	PHE	1686	19.842	-7.961	9.743	1.00	23.14
	ATOM	1941	C	PHE	1686	22.389	-3.890	8.300	1.00	22.62
	ATOM	1942	O	PHE	1686	22.579	-4.424	9.407	1.00	23.09
	ATOM	1943	N	GLY	1687	23.354	-3.726	7.401	1.00	23.50
	ATOM	1945	CA	GLY	1687	24.718	-4.110	7.721	1.00	23.83
	ATOM	1946	C	GLY	1687	25.230	-3.247	8.867	1.00	21.95
5	ATOM	1947	O	GLY	1687	25.901	-3.749	9.778	1.00	23.76
	ATOM	1948	N	VAL	1688	24.928	-1.947	8.817	1.00	20.60
	ATOM	1950	CA	VAL	1688	25.331	-1.009	9.877	1.00	22.34
	ATOM	1951	CB	VAL	1688	25.020	0.481	9.488	1.00	20.94
	ATOM	1952	CG1	VAL	1688	25.547	1.438	10.543	1.00	21.65
	ATOM	1953	CG2	VAL	1688	25.675	0.832	8.160	1.00	22.71
	ATOM	1954	C	VAL	1688	24.598	-1.400	11.182	1.00	22.71
	ATOM	1955	O	VAL	1688	25.199	-1.479	12.255	1.00	22.78
	ATOM	1956	N	LEU	1689	23.310	-1.706	11.082	1.00	22.81
10	ATOM	1958	CA	LEU	1689	22.534	-2.111	12.253	1.00	25.21
	ATOM	1959	CB	LEU	1689	21.064	-2.357	11.866	1.00	25.78
	ATOM	1960	CG	LEU	1689	20.006	-2.491	12.976	1.00	29.18
	ATOM	1961	CD1	LEU	1689	18.643	-2.109	12.408	1.00	28.57
	ATOM	1962	CD2	LEU	1689	19.959	-3.895	13.553	1.00	26.77
	ATOM	1963	C	LEU	1689	23.158	-3.375	12.871	1.00	25.88
	ATOM	1964	O	LEU	1689	23.249	-3.483	14.099	1.00	26.50
	ATOM	1965	N	LEU	1690	23.588	-4.323	12.031	1.00	25.84
	ATOM	1967	CA	LEU	1690	24.221	-5.544	12.523	1.00	24.43
15	ATOM	1968	CB	LEU	1690	24.669	-6.444	11.377	1.00	26.35
	ATOM	1969	CG	LEU	1690	23.672	-7.309	10.604	1.00	26.57
	ATOM	1970	CD1	LEU	1690	24.415	-7.962	9.446	1.00	26.33
	ATOM	1971	CD2	LEU	1690	23.042	-8.380	11.502	1.00	24.66
	ATOM	1972	C	LEU	1690	25.430	-5.168	13.349	1.00	25.22
	ATOM	1973	O	LEU	1690	25.646	-5.706	14.435	1.00	24.84
	ATOM	1974	N	TRP	1691	26.211	-4.227	12.826	1.00	26.92
	ATOM	1976	CA	TRP	1691	27.405	-3.728	13.504	1.00	25.77
	ATOM	1977	CB	TRP	1691	28.072	-2.659	12.631	1.00	24.82
20	ATOM	1978	CG	TRP	1691	29.394	-2.195	13.154	1.00	27.98
	ATOM	1979	CD2	TRP	1691	29.623	-1.104	14.056	1.00	26.95
	ATOM	1980	CE2	TRP	1691	31.022	-1.015	14.259	1.00	27.64
	ATOM	1981	CE3	TRP	1691	28.783	-0.191	14.708	1.00	26.28
	ATOM	1982	CD1	TRP	1691	30.634	-2.715	12.856	1.00	28.38
	ATOM	1983	NE1	TRP	1691	31.609	-2.009	13.518	1.00	29.56
	ATOM	1985	CZ2	TRP	1691	31.599	-0.045	15.086	1.00	27.78
	ATOM	1986	CZ3	TRP	1691	29.356	0.769	15.533	1.00	27.63
	ATOM	1987	CH2	TRP	1691	30.753	0.835	15.713	1.00	30.68
25	ATOM	1988	C	TRP	1691	27.025	-3.147	14.876	1.00	26.38
	ATOM	1989	O	TRP	1691	27.686	-3.414	15.883	1.00	24.82
	ATOM	1990	N	GLU	1692	25.926	-2.393	14.916	1.00	27.62
	ATOM	1992	CA	GLU	1692	25.442	-1.790	16.162	1.00	27.02
	ATOM	1993	CB	GLU	1692	24.193	-0.963	15.919	1.00	29.27
	ATOM	1994	CG	GLU	1692	24.345	0.236	15.028	1.00	24.77
	ATOM	1995	CD	GLU	1692	23.046	0.992	14.962	1.00	25.98
	ATOM	1996	OE1	GLU	1692	22.238	0.694	14.058	1.00	22.29
	ATOM	1997	OE2	GLU	1692	22.803	1.837	15.850	1.00	25.12
30	ATOM	1998	C	GLU	1692	25.092	-2.856	17.191	1.00	27.88
	ATOM	1999	O	GLU	1692	25.333	-2.673	18.379	1.00	30.18
	ATOM	2000	N	ILE	1693	24.500	-3.956	16.734	1.00	26.65
	ATOM	2002	CA	ILE	1693	24.118	-5.054	17.618	1.00	26.14
	ATOM	2003	CB	ILE	1693	23.279	-6.144	16.858	1.00	25.37
	ATOM	2004	CG2	ILE	1693	23.144	-7.445	17.704	1.00	21.48
	ATOM	2005	CG1	ILE	1693	21.897	-5.563	16.496	1.00	24.80
	ATOM	2006	CD1	ILE	1693	21.017	-6.479	15.642	1.00	22.40
	ATOM	2007	C	ILE	1693	25.345	-5.698	18.239	1.00	27.17
35	ATOM	2008	O	ILE	1693	25.424	-5.864	19.452	1.00	27.30
	ATOM	2009	N	PHE	1694	26.329	-6.017	17.414	1.00	29.98
	ATOM	2011	CA	PHE	1694	27.518	-6.674	17.925	1.00	30.61
	ATOM	2012	CB	PHE	1694	28.140	-7.556	16.843	1.00	28.30
	ATOM	2013	CG	PHE	1694	27.197	-8.611	16.353	1.00	30.91

	ATOM	2014	CD1	PHE	1694	26.627	-8.526	15.088	1.00	34.46
	ATOM	2015	CD2	PHE	1694	26.743	-9.601	17.224	1.00	32.71
	ATOM	2016	CE1	PHE	1694	25.622	-9.409	14.701	1.00	34.24
	ATOM	2017	CE2	PHE	1694	25.737	-10.490	16.844	1.00	32.44
	ATOM	2018	CZ	PHE	1694	25.170	-10.387	15.592	1.00	32.70
	ATOM	2019	C	PHE	1694	28.512	-5.796	18.689	1.00	31.74
	ATOM	2020	O	PHE	1694	29.469	-6.299	19.276	1.00	35.15
5	ATOM	2021	N	THR	1695	28.275	-4.489	18.698	1.00	31.12
	ATOM	2023	CA	THR	1695	29.101	-3.575	19.473	1.00	29.96
	ATOM	2024	CB	THR	1695	29.532	-2.351	18.657	1.00	28.09
	ATOM	2025	OG1	THR	1695	28.373	-1.685	18.150	1.00	30.65
	ATOM	2027	CG2	THR	1695	30.450	-2.767	17.510	1.00	23.37
	ATOM	2028	C	THR	1695	28.240	-3.128	20.664	1.00	30.01
	ATOM	2029	O	THR	1695	28.617	-2.233	21.427	1.00	31.14
	ATOM	2030	N	LEU	1696	27.078	-3.766	20.797	1.00	27.96
10	ATOM	2032	CA	LEU	1696	26.113	-3.490	21.862	1.00	30.25
	ATOM	2033	CB	LEU	1696	26.633	-3.985	23.216	1.00	33.54
	ATOM	2034	CG	LEU	1696	26.899	-5.482	23.339	1.00	32.61
	ATOM	2035	CD1	LEU	1696	27.473	-5.777	24.711	1.00	33.54
	ATOM	2036	CD2	LEU	1696	25.602	-6.233	23.126	1.00	36.37
	ATOM	2037	C	LEU	1696	25.717	-2.031	21.958	1.00	28.19
	ATOM	2038	O	LEU	1696	25.792	-1.431	23.018	1.00	29.18
	ATOM	2039	N	GLY	1697	25.251	-1.472	20.853	1.00	28.24
	ATOM	2041	CA	GLY	1697	24.851	-0.082	20.858	1.00	28.29
	ATOM	2042	C	GLY	1697	25.990	0.845	20.499	1.00	27.68
15	ATOM	2043	O	GLY	1697	25.960	2.022	20.846	1.00	29.79
	ATOM	2044	N	GLY	1698	26.986	0.324	19.790	1.00	29.23
	ATOM	2046	CA	GLY	1698	28.115	1.143	19.396	1.00	30.79
	ATOM	2047	C	GLY	1698	27.743	2.212	18.388	1.00	32.38
	ATOM	2048	O	GLY	1698	26.817	2.044	17.601	1.00	33.26
	ATOM	2049	N	SER	1699	28.480	3.314	18.411	1.00	30.81
	ATOM	2051	CA	SER	1699	28.268	4.437	17.510	1.00	32.03
	ATOM	2052	CB	SER	1699	28.528	5.728	18.288	1.00	34.81
	ATOM	2053	OG	SER	1699	28.559	6.862	17.440	1.00	40.03
20	ATOM	2055	C	SER	1699	29.198	4.325	16.282	1.00	32.20
	ATOM	2056	O	SER	1699	30.428	4.325	16.408	1.00	31.67
	ATOM	2057	N	PRO	1700	28.620	4.148	15.082	1.00	32.62
	ATOM	2058	CD	PRO	1700	27.178	4.142	14.773	1.00	34.19
	ATOM	2059	CA	PRO	1700	29.422	4.028	13.856	1.00	31.76
	ATOM	2060	CB	PRO	1700	28.357	3.830	12.759	1.00	32.04
	ATOM	2061	CG	PRO	1700	27.145	3.351	13.502	1.00	33.17
	ATOM	2062	C	PRO	1700	30.214	5.309	13.609	1.00	28.70
	ATOM	2063	O	PRO	1700	29.715	6.391	13.871	1.00	28.57
25	ATOM	2064	N	TYR	1701	31.459	5.181	13.164	1.00	28.61
	ATOM	2066	CA	TYR	1701	32.311	6.338	12.870	1.00	29.92
	ATOM	2067	CB	TYR	1701	31.920	6.946	11.510	1.00	30.15
	ATOM	2068	CG	TYR	1701	31.965	5.994	10.339	1.00	36.17
	ATOM	2069	CD1	TYR	1701	30.799	5.630	9.664	1.00	39.26
	ATOM	2070	CE1	TYR	1701	30.839	4.767	8.571	1.00	41.51
	ATOM	2071	CD2	TYR	1701	33.176	5.467	9.893	1.00	37.48
	ATOM	2072	CE2	TYR	1701	33.229	4.607	8.805	1.00	42.94
	ATOM	2073	CZ	TYR	1701	32.059	4.263	8.146	1.00	45.72
30	ATOM	2074	OH	TYR	1701	32.110	3.431	7.043	1.00	53.99
	ATOM	2076	C	TYR	1701	32.279	7.448	13.941	1.00	31.09
	ATOM	2077	O	TYR	1701	31.935	8.592	13.649	1.00	31.93
	ATOM	2078	N	PRO	1702	32.649	7.135	15.189	1.00	34.66
	ATOM	2079	CD	PRO	1702	33.212	5.879	15.708	1.00	36.83
	ATOM	2080	CA	PRO	1702	32.631	8.173	16.231	1.00	33.54
	ATOM	2081	CB	PRO	1702	33.116	7.432	17.479	1.00	32.18
	ATOM	2082	CG	PRO	1702	32.903	6.001	17.175	1.00	40.82
	ATOM	2083	C	PRO	1702	33.628	9.274	15.883	1.00	34.78
35	ATOM	2084	O	PRO	1702	34.750	8.981	15.455	1.00	33.97
	ATOM	2085	N	GLY	1703	33.220	10.528	16.074	1.00	36.45
	ATOM	2087	CA	GLY	1703	34.085	11.667	15.788	1.00	34.40
	ATOM	2088	C	GLY	1703	34.245	12.006	14.317	1.00	34.34
	ATOM	2089	O	GLY	1703	34.977	12.933	13.969	1.00	34.20

	ATOM	2090	N	VAL	1704	33.552	11.275	13.445	1.00	35.02
	ATOM	2092	CA	VAL	1704	33.641	11.512	12.007	1.00	32.77
	ATOM	2093	CB	VAL	1704	33.614	10.176	11.221	1.00	31.32
	ATOM	2094	CG1	VAL	1704	33.628	10.435	9.709	1.00	31.46
	ATOM	2095	CG2	VAL	1704	34.796	9.297	11.637	1.00	27.62
	ATOM	2096	C	VAL	1704	32.510	12.410	11.513	1.00	33.35
	ATOM	2097	O	VAL	1704	31.337	12.070	11.640	1.00	33.94
5	ATOM	2098	N	PRO	1705	32.849	13.589	10.974	1.00	32.43
	ATOM	2099	CD	PRO	1705	34.181	14.221	10.949	1.00	32.77
	ATOM	2100	CA	PRO	1705	31.826	14.505	10.472	1.00	33.61
	ATOM	2101	CB	PRO	1705	32.545	15.853	10.509	1.00	33.21
	ATOM	2102	CG	PRO	1705	33.935	15.482	10.141	1.00	35.53
	ATOM	2103	C	PRO	1705	31.395	14.138	9.052	1.00	33.91
	ATOM	2104	O	PRO	1705	32.113	13.409	8.354	1.00	32.65
	ATOM	2105	N	VAL	1706	30.255	14.684	8.619	1.00	33.82
	ATOM	2107	CA	VAL	1706	29.689	14.447	7.280	1.00	33.97
10	ATOM	2108	CB	VAL	1706	28.617	15.513	6.943	1.00	37.41
	ATOM	2109	CG1	VAL	1706	28.045	15.282	5.556	1.00	41.12
	ATOM	2110	CG2	VAL	1706	27.507	15.484	7.971	1.00	38.89
	ATOM	2111	C	VAL	1706	30.712	14.428	6.135	1.00	32.32
	ATOM	2112	O	VAL	1706	30.819	13.450	5.398	1.00	32.58
	ATOM	2113	N	GLU	1707	31.477	15.504	6.004	1.00	31.15
	ATOM	2115	CA	GLU	1707	32.478	15.630	4.956	1.00	29.82
	ATOM	2116	CB	GLU	1707	33.172	16.989	5.048	1.00	30.05
	ATOM	2117	C	GLU	1707	33.531	14.541	4.959	1.00	28.52
15	ATOM	2118	O	GLU	1707	33.995	14.134	3.896	1.00	30.85
	ATOM	2119	N	GLU	1708	33.958	14.110	6.143	1.00	28.70
	ATOM	2121	CA	GLU	1708	34.978	13.073	6.235	1.00	29.50
	ATOM	2122	CB	GLU	1708	35.590	13.010	7.641	1.00	31.28
	ATOM	2123	CG	GLU	1708	36.281	14.289	8.103	1.00	41.63
	ATOM	2124	CD	GLU	1708	37.454	14.718	7.237	1.00	49.91
	ATOM	2125	OE1	GLU	1708	38.020	13.876	6.498	1.00	53.57
	ATOM	2126	OE2	GLU	1708	37.821	15.916	7.308	1.00	58.45
	ATOM	2127	C	GLU	1708	34.365	11.730	5.878	1.00	30.00
20	ATOM	2128	O	GLU	1708	35.016	10.874	5.257	1.00	28.43
	ATOM	2129	N	LEU	1709	33.103	11.559	6.257	1.00	30.08
	ATOM	2131	CA	LEU	1709	32.392	10.324	5.964	1.00	29.19
	ATOM	2132	CB	LEU	1709	30.995	10.347	6.592	1.00	28.97
	ATOM	2133	CG	LEU	1709	30.109	9.186	6.137	1.00	30.66
	ATOM	2134	CD1	LEU	1709	30.664	7.866	6.659	1.00	29.24
	ATOM	2135	CD2	LEU	1709	28.684	9.403	6.593	1.00	29.29
	ATOM	2136	C	LEU	1709	32.294	10.130	4.449	1.00	28.26
	ATOM	2137	O	LEU	1709	32.450	9.011	3.948	1.00	28.86
25	ATOM	2138	N	PHE	1710	32.016	11.220	3.735	1.00	26.86
	ATOM	2140	CA	PHE	1710	31.903	11.192	2.285	1.00	28.86
	ATOM	2141	CB	PHE	1710	31.632	12.593	1.743	1.00	31.88
	ATOM	2142	CG	PHE	1710	30.249	13.095	2.014	1.00	37.62
	ATOM	2143	CD1	PHE	1710	29.265	12.247	2.509	1.00	42.63
	ATOM	2144	CD2	PHE	1710	29.931	14.424	1.792	1.00	43.53
	ATOM	2145	CE1	PHE	1710	27.977	12.718	2.783	1.00	45.99
	ATOM	2146	CE2	PHE	1710	28.648	14.905	2.061	1.00	46.25
	ATOM	2147	CZ	PHE	1710	27.670	14.045	2.559	1.00	44.45
30	ATOM	2148	C	PHE	1710	33.193	10.660	1.681	1.00	30.42
	ATOM	2149	O	PHE	1710	33.174	9.807	0.792	1.00	29.01
	ATOM	2150	N	LYS	1711	34.309	11.152	2.212	1.00	30.64
	ATOM	2152	CA	LYS	1711	35.650	10.762	1.786	1.00	32.89
	ATOM	2153	CB	LYS	1711	36.670	11.655	2.502	1.00	37.91
	ATOM	2154	CG	LYS	1711	38.108	11.479	2.088	1.00	42.99
	ATOM	2155	CD	LYS	1711	38.976	12.528	2.752	1.00	47.45
	ATOM	2156	CE	LYS	1711	40.380	12.505	2.182	1.00	52.35
	ATOM	2157	NZ	LYS	1711	41.104	11.272	2.587	1.00	58.47
35	ATOM	2161	C	LYS	1711	35.913	9.273	2.071	1.00	32.23
	ATOM	2162	O	LYS	1711	36.445	8.559	1.216	1.00	30.79
	ATOM	2163	N	LEU	1712	35.533	8.807	3.264	1.00	31.37
	ATOM	2165	CA	LEU	1712	35.704	7.399	3.630	1.00	29.46
	ATOM	2166	CB	LEU	1712	35.220	7.117	5.065	1.00	28.57

	ATOM	2167	CG	LEU	1712	36.045	7.662	6.242	1.00	30.18
	ATOM	2168	CD1	LEU	1712	35.395	7.349	7.569	1.00	26.92
	ATOM	2169	CD2	LEU	1712	37.452	7.083	6.210	1.00	30.88
	ATOM	2170	C	LEU	1712	34.922	6.539	2.651	1.00	28.99
	ATOM	2171	O	LEU	1712	35.438	5.551	2.136	1.00	30.73
	ATOM	2172	N	LEU	1713	33.675	6.915	2.388	1.00	30.13
	ATOM	2174	CA	LEU	1713	32.851	6.158	1.456	1.00	32.10
5	ATOM	2175	CB	LEU	1713	31.411	6.685	1.443	1.00	35.23
	ATOM	2176	CG	LEU	1713	30.612	6.292	2.691	1.00	37.47
	ATOM	2177	CD1	LEU	1713	29.265	6.982	2.720	1.00	40.85
	ATOM	2178	CD2	LEU	1713	30.447	4.788	2.723	1.00	39.61
	ATOM	2179	C	LEU	1713	33.441	6.147	0.047	1.00	32.70
	ATOM	2180	O	LEU	1713	33.548	5.090	-0.578	1.00	31.86
	ATOM	2181	N	LYS	1714	33.859	7.309	-0.444	1.00	32.42
	ATOM	2183	CA	LYS	1714	34.440	7.387	-1.776	1.00	32.56
	ATOM	2184	CB	LYS	1714	34.826	8.824	-2.112	1.00	33.02
10	ATOM	2185	CG	LYS	1714	33.640	9.736	-2.297	1.00	35.56
	ATOM	2186	CD	LYS	1714	32.736	9.235	-3.396	1.00	37.94
	ATOM	2187	CE	LYS	1714	31.635	10.246	-3.682	1.00	42.57
	ATOM	2188	NZ	LYS	1714	30.727	9.805	-4.779	1.00	47.40
	ATOM	2192	C	LYS	1714	35.664	6.488	-1.885	1.00	35.36
	ATOM	2193	O	LYS	1714	35.927	5.898	-2.937	1.00	36.68
	ATOM	2194	N	GLU	1715	36.376	6.338	-0.775	1.00	34.51
	ATOM	2196	CA	GLU	1715	37.577	5.527	-0.749	1.00	35.31
	ATOM	2197	CB	GLU	1715	38.566	6.125	0.250	1.00	37.07
15	ATOM	2198	CG	GLU	1715	38.967	7.537	-0.163	1.00	43.62
	ATOM	2199	CD	GLU	1715	39.735	8.310	0.893	1.00	49.75
	ATOM	2200	OE1	GLU	1715	39.906	7.814	2.029	1.00	49.71
	ATOM	2201	OE2	GLU	1715	40.163	9.442	0.572	1.00	55.13
	ATOM	2202	C	GLU	1715	37.321	4.048	-0.487	1.00	34.08
	ATOM	2203	O	GLU	1715	38.259	3.260	-0.438	1.00	34.82
	ATOM	2204	N	GLY	1716	36.049	3.674	-0.366	1.00	31.53
	ATOM	2206	CA	GLY	1716	35.695	2.288	-0.133	1.00	27.58
	ATOM	2207	C	GLY	1716	35.966	1.765	1.262	1.00	28.60
20	ATOM	2208	O	GLY	1716	36.069	0.560	1.464	1.00	27.81
	ATOM	2209	N	HIS	1717	36.062	2.663	2.236	1.00	29.10
	ATOM	2211	CA	HIS	1717	36.319	2.263	3.617	1.00	29.30
	ATOM	2212	CB	HIS	1717	36.501	3.510	4.486	1.00	30.54
	ATOM	2213	CG	HIS	1717	36.788	3.213	5.930	1.00	32.88
	ATOM	2214	CD2	HIS	1717	37.961	3.023	6.586	1.00	32.21
	ATOM	2215	ND1	HIS	1717	35.798	3.108	6.881	1.00	34.22
	ATOM	2217	CE1	HIS	1717	36.342	2.865	8.061	1.00	31.51
	ATOM	2218	NE2	HIS	1717	37.651	2.809	7.907	1.00	31.94
25	ATOM	2220	C	HIS	1717	35.180	1.416	4.183	1.00	28.42
	ATOM	2221	O	HIS	1717	34.017	1.666	3.885	1.00	30.71
	ATOM	2222	N	ARG	1718	35.526	0.450	5.028	1.00	27.75
	ATOM	2224	CA	ARG	1718	34.559	-0.423	5.688	1.00	27.58
	ATOM	2225	CB	ARG	1718	34.562	-1.813	5.048	1.00	29.07
	ATOM	2226	CG	ARG	1718	34.078	-1.860	3.597	1.00	28.39
	ATOM	2227	CD	ARG	1718	32.609	-1.412	3.475	1.00	27.64
	ATOM	2228	NE	ARG	1718	32.091	-1.467	2.096	1.00	24.37
	ATOM	2230	CZ	ARG	1718	32.173	-0.476	1.210	1.00	24.26
30	ATOM	2231	NH1	ARG	1718	32.768	0.668	1.532	1.00	23.98
	ATOM	2234	NH2	ARG	1718	31.595	-0.603	0.019	1.00	21.60
	ATOM	2237	C	ARG	1718	35.005	-0.521	7.148	1.00	30.11
	ATOM	2238	O	ARG	1718	36.201	-0.623	7.428	1.00	30.60
	ATOM	2239	N	MET	1719	34.056	-0.430	8.074	1.00	30.69
	ATOM	2241	CA	MET	1719	34.350	-0.490	9.501	1.00	31.77
	ATOM	2242	CB	MET	1719	33.072	-0.302	10.335	1.00	34.56
	ATOM	2243	CG	MET	1719	32.408	1.060	10.194	1.00	36.71
	ATOM	2244	SD	MET	1719	31.015	1.307	11.314	1.00	38.66
35	ATOM	2245	CE	MET	1719	29.797	0.338	10.544	1.00	36.99
	ATOM	2246	C	MET	1719	34.998	-1.810	9.854	1.00	30.20
	ATOM	2247	O	MET	1719	34.802	-2.802	9.169	1.00	31.41
	ATOM	2248	N	ASP	1720	35.778	-1.809	10.926	1.00	32.49
	ATOM	2250	CA	ASP	1720	36.473	-3.008	11.385	1.00	33.60

	ATOM	2251	CB	ASP	1720	37.593	-2.630	12.358	1.00	37.65
	ATOM	2252	CG	ASP	1720	38.628	-1.688	11.747	1.00	44.69
	ATOM	2253	OD1	ASP	1720	38.442	-1.223	10.596	1.00	50.97
	ATOM	2254	OD2	ASP	1720	39.632	-1.398	12.443	1.00	48.67
	ATOM	2255	C	ASP	1720	35.524	-3.977	12.079	1.00	31.26
	ATOM	2256	O	ASP	1720	34.466	-3.581	12.561	1.00	32.69
	ATOM	2257	N	LYS	1721	35.943	-5.231	12.191	1.00	32.76
5	ATOM	2259	CA	LYS	1721	35.133	-6.261	12.825	1.00	32.28
	ATOM	2260	CB	LYS	1721	35.726	-7.649	12.575	1.00	33.63
	ATOM	2261	CG	LYS	1721	34.854	-8.773	13.125	1.00	35.68
	ATOM	2262	CD	LYS	1721	35.392	-10.126	12.784	1.00	36.22
	ATOM	2263	CE	LYS	1721	36.054	-10.749	13.988	1.00	42.65
	ATOM	2264	NZ	LYS	1721	36.354	-12.189	13.756	1.00	46.15
	ATOM	2268	C	LYS	1721	35.039	-6.051	14.315	1.00	35.55
	ATOM	2269	O	LYS	1721	36.064	-5.926	14.986	1.00	37.78
	ATOM	2270	N	PRO	1722	33.807	-6.017	14.861	1.00	36.91
10	ATOM	2271	CD	PRO	1722	32.504	-6.105	14.179	1.00	34.43
	ATOM	2272	CA	PRO	1722	33.630	-5.827	16.305	1.00	37.77
	ATOM	2273	CB	PRO	1722	32.107	-5.846	16.465	1.00	36.32
	ATOM	2274	CG	PRO	1722	31.603	-5.375	15.122	1.00	34.53
	ATOM	2275	C	PRO	1722	34.246	-7.026	17.023	1.00	39.31
	ATOM	2276	O	PRO	1722	34.274	-8.136	16.477	1.00	38.78
	ATOM	2277	N	SER	1723	34.777	-6.820	18.222	1.00	42.72
	ATOM	2279	CA	SER	1723	35.336	-7.954	18.940	1.00	45.01
	ATOM	2280	CB	SER	1723	36.152	-7.508	20.160	1.00	46.88
15	ATOM	2281	OG	SER	1723	35.327	-7.027	21.208	1.00	53.47
	ATOM	2283	C	SER	1723	34.088	-8.731	19.359	1.00	46.67
	ATOM	2284	O	SER	1723	32.982	-8.172	19.417	1.00	46.21
	ATOM	2285	N	ASN	1724	34.237	-10.025	19.590	1.00	47.80
	ATOM	2287	CA	ASN	1724	33.092	-10.826	19.999	1.00	52.78
	ATOM	2288	CB	ASN	1724	32.559	-10.319	21.355	1.00	57.86
	ATOM	2289	CG	ASN	1724	33.679	-10.091	22.370	1.00	61.99
	ATOM	2290	OD1	ASN	1724	34.531	-10.959	22.585	1.00	63.17
	ATOM	2291	ND2	ASN	1724	33.712	-8.899	22.953	1.00	63.56
20	ATOM	2294	C	ASN	1724	32.015	-10.779	18.893	1.00	51.43
	ATOM	2295	O	ASN	1724	30.859	-10.423	19.108	1.00	51.56
	ATOM	2296	N	CYS	1725	32.454	-11.087	17.683	1.00	48.91
	ATOM	2298	CA	CYS	1725	31.600	-11.136	16.508	1.00	45.62
	ATOM	2299	CB	CYS	1725	31.526	-9.771	15.811	1.00	44.83
	ATOM	2300	SG	CYS	1725	30.693	-9.816	14.194	1.00	41.83
	ATOM	2301	C	CYS	1725	32.341	-12.135	15.640	1.00	42.30
	ATOM	2302	O	CYS	1725	33.566	-12.045	15.493	1.00	44.63
	ATOM	2303	N	THR	1726	31.627	-13.134	15.141	1.00	37.46
25	ATOM	2305	CA	THR	1726	32.259	-14.153	14.320	1.00	35.29
	ATOM	2306	CB	THR	1726	31.339	-15.367	14.132	1.00	33.44
	ATOM	2307	OG1	THR	1726	30.109	-14.952	13.523	1.00	34.77
	ATOM	2309	CG2	THR	1726	31.070	-16.019	15.454	1.00	30.22
	ATOM	2310	C	THR	1726	32.668	-13.622	12.963	1.00	33.53
	ATOM	2311	O	THR	1726	32.158	-12.593	12.518	1.00	32.93
	ATOM	2312	N	ASN	1727	33.619	-14.294	12.319	1.00	32.72
	ATOM	2314	CA	ASN	1727	34.030	-13.867	10.983	1.00	35.91
	ATOM	2315	CB	ASN	1727	35.166	-14.724	10.422	1.00	40.64
30	ATOM	2316	CG	ASN	1727	36.463	-14.533	11.168	1.00	46.52
	ATOM	2317	OD1	ASN	1727	37.047	-13.453	11.158	1.00	49.98
	ATOM	2318	ND2	ASN	1727	36.931	-15.592	11.814	1.00	49.04
	ATOM	2321	C	ASN	1727	32.824	-14.006	10.058	1.00	34.27
	ATOM	2322	O	ASN	1727	32.681	-13.236	9.116	1.00	32.96
	ATOM	2323	N	GLU	1728	31.969	-14.997	10.326	1.00	32.49
	ATOM	2325	CA	GLU	1728	30.778	-15.235	9.510	1.00	31.99
	ATOM	2326	CB	GLU	1728	30.064	-16.504	9.975	1.00	34.15
	ATOM	2327	CG	GLU	1728	28.836	-16.866	9.156	1.00	35.63
35	ATOM	2328	CD	GLU	1728	28.187	-18.169	9.608	1.00	39.72
	ATOM	2329	OE1	GLU	1728	28.200	-18.463	10.824	1.00	42.25
	ATOM	2330	OE2	GLU	1728	27.654	-18.896	8.742	1.00	39.87
	ATOM	2331	C	GLU	1728	29.814	-14.049	9.549	1.00	30.76
	ATOM	2332	O	GLU	1728	29.309	-13.602	8.512	1.00	29.58

	ATOM	2333	N	LEU	1729	29.559	-13.544	10.750	1.00	30.01
	ATOM	2335	CA	LEU	1729	28.670	-12.408	10.911	1.00	30.21
	ATOM	2336	CB	LEU	1729	28.225	-12.272	12.364	1.00	30.13
	ATOM	2337	CG	LEU	1729	27.208	-13.350	12.748	1.00	33.61
	ATOM	2338	CD1	LEU	1729	27.119	-13.483	14.262	1.00	33.71
	ATOM	2339	CD2	LEU	1729	25.844	-13.021	12.139	1.00	30.31
	ATOM	2340	C	LEU	1729	29.316	-11.133	10.390	1.00	30.26
5	ATOM	2341	O	LEU	1729	28.619	-10.229	9.938	1.00	28.89
	ATOM	2342	N	TYR	1730	30.648	-11.063	10.435	1.00	28.91
	ATOM	2344	CA	TYR	1730	31.343	-9.893	9.912	1.00	28.91
	ATOM	2345	CB	TYR	1730	32.804	-9.861	10.359	1.00	29.09
	ATOM	2346	CG	TYR	1730	33.537	-8.639	9.857	1.00	30.15
	ATOM	2347	CD1	TYR	1730	33.037	-7.358	10.103	1.00	29.97
	ATOM	2348	CE1	TYR	1730	33.688	-6.227	9.626	1.00	28.99
	ATOM	2349	CD2	TYR	1730	34.716	-8.757	9.119	1.00	29.24
	ATOM	2350	CE2	TYR	1730	35.386	-7.620	8.632	1.00	28.25
10	ATOM	2351	CZ	TYR	1730	34.861	-6.362	8.889	1.00	28.41
	ATOM	2352	OH	TYR	1730	35.485	-5.227	8.405	1.00	31.64
	ATOM	2354	C	TYR	1730	31.260	-9.943	8.379	1.00	27.10
	ATOM	2355	O	TYR	1730	31.078	-8.920	7.726	1.00	27.46
	ATOM	2356	N	MET	1731	31.390	-11.138	7.813	1.00	26.68
	ATOM	2358	CA	MET	1731	31.298	-11.315	6.372	1.00	28.68
	ATOM	2359	CB	MET	1731	31.526	-12.778	5.989	1.00	35.43
	ATOM	2360	CG	MET	1731	31.158	-13.087	4.545	1.00	46.19
	ATOM	2361	SD	MET	1731	31.441	-14.804	4.064	1.00	60.10
15	ATOM	2362	CE	MET	1731	32.603	-14.550	2.678	1.00	58.31
	ATOM	2363	C	MET	1731	29.917	-10.858	5.912	1.00	27.42
	ATOM	2364	O	MET	1731	29.782	-10.227	4.871	1.00	30.80
	ATOM	2365	N	MET	1732	28.893	-11.191	6.688	1.00	28.53
	ATOM	2367	CA	MET	1732	27.522	-10.777	6.389	1.00	26.47
	ATOM	2368	CB	MET	1732	26.562	-11.308	7.458	1.00	25.79
	ATOM	2369	CG	MET	1732	25.116	-10.838	7.274	1.00	26.01
	ATOM	2370	SD	MET	1732	24.004	-11.550	8.469	1.00	26.22
	ATOM	2371	CE	MET	1732	23.787	-13.195	7.783	1.00	23.74
20	ATOM	2372	C	MET	1732	27.445	-9.243	6.319	1.00	25.15
	ATOM	2373	O	MET	1732	26.886	-8.691	5.379	1.00	25.41
	ATOM	2374	N	MET	1733	28.024	-8.564	7.308	1.00	26.48
	ATOM	2376	CA	MET	1733	28.057	-7.104	7.331	1.00	27.09
	ATOM	2377	CB	MET	1733	28.903	-6.594	8.488	1.00	25.91
	ATOM	2378	CG	MET	1733	28.235	-6.556	9.824	1.00	31.64
	ATOM	2379	SD	MET	1733	29.442	-6.111	11.094	1.00	29.59
	ATOM	2380	CE	MET	1733	28.886	-7.126	12.420	1.00	28.14
	ATOM	2381	C	MET	1733	28.720	-6.613	6.056	1.00	28.43
25	ATOM	2382	O	MET	1733	28.185	-5.753	5.372	1.00	31.37
	ATOM	2383	N	ARG	1734	29.891	-7.169	5.747	1.00	28.57
	ATOM	2385	CA	ARG	1734	30.642	-6.783	4.551	1.00	27.00
	ATOM	2386	CB	ARG	1734	32.007	-7.488	4.510	1.00	25.98
	ATOM	2387	CG	ARG	1734	32.927	-7.154	5.707	1.00	28.13
	ATOM	2388	CD	ARG	1734	33.229	-5.672	5.765	1.00	29.97
	ATOM	2389	NE	ARG	1734	33.922	-5.256	4.553	1.00	40.49
	ATOM	2391	CZ	ARG	1734	35.238	-5.361	4.363	1.00	43.95
	ATOM	2392	NH1	ARG	1734	36.023	-5.853	5.318	1.00	41.81
30	ATOM	2395	NH2	ARG	1734	35.760	-5.048	3.184	1.00	46.20
	ATOM	2398	C	ARG	1734	29.859	-7.037	3.268	1.00	24.57
	ATOM	2399	O	ARG	1734	29.992	-6.290	2.314	1.00	24.94
	ATOM	2400	N	ASP	1735	29.071	-8.107	3.235	1.00	24.79
	ATOM	2402	CA	ASP	1735	28.254	-8.420	2.061	1.00	23.88
	ATOM	2403	CB	ASP	1735	27.669	-9.830	2.150	1.00	25.95
	ATOM	2404	CG	ASP	1735	28.724	-10.913	2.024	1.00	27.60
	ATOM	2405	OD1	ASP	1735	29.842	-10.632	1.529	1.00	27.75
	ATOM	2406	OD2	ASP	1735	28.432	-12.051	2.430	1.00	28.90
35	ATOM	2407	C	ASP	1735	27.139	-7.396	1.941	1.00	22.61
	ATOM	2408	O	ASP	1735	26.777	-6.996	0.833	1.00	22.66
	ATOM	2409	N	CYS	1736	26.611	-6.965	3.085	1.00	20.61
	ATOM	2411	CA	CYS	1736	25.561	-5.952	3.109	1.00	23.63
	ATOM	2412	CB	CYS	1736	25.007	-5.767	4.534	1.00	21.98

	ATOM	2413	SG	CYS	1736	23.934	-7.126	5.111	1.00	22.95
	ATOM	2414	C	CYS	1736	26.129	-4.633	2.599	1.00	23.62
	ATOM	2415	O	CYS	1736	25.403	-3.797	2.047	1.00	22.15
	ATOM	2416	N	TRP	1737	27.438	-4.461	2.775	1.00	24.37
	ATOM	2418	CA	TRP	1737	28.123	-3.247	2.342	1.00	23.77
	ATOM	2419	CB	TRP	1737	29.162	-2.810	3.371	1.00	19.38
	ATOM	2420	CG	TRP	1737	28.601	-2.520	4.718	1.00	21.62
5	ATOM	2421	CD2	TRP	1737	29.268	-2.688	5.971	1.00	24.81
	ATOM	2422	CE2	TRP	1737	28.371	-2.278	6.980	1.00	25.95
	ATOM	2423	CE3	TRP	1737	30.534	-3.165	6.340	1.00	29.02
	ATOM	2424	CD1	TRP	1737	27.359	-2.024	5.007	1.00	23.21
	ATOM	2425	NE1	TRP	1737	27.213	-1.876	6.362	1.00	21.80
	ATOM	2427	CZ2	TRP	1737	28.710	-2.305	8.347	1.00	26.68
	ATOM	2428	CZ3	TRP	1737	30.873	-3.198	7.699	1.00	31.06
	ATOM	2429	CH2	TRP	1737	29.959	-2.774	8.685	1.00	30.18
	ATOM	2430	C	TRP	1737	28.788	-3.372	0.978	1.00	24.88
10	ATOM	2431	O	TRP	1737	29.737	-2.646	0.689	1.00	25.11
	ATOM	2432	N	HIS	1738	28.303	-4.278	0.132	1.00	25.27
	ATOM	2434	CA	HIS	1738	28.888	-4.406	-1.191	1.00	24.27
	ATOM	2435	CB	HIS	1738	28.280	-5.573	-1.986	1.00	25.24
	ATOM	2436	CG	HIS	1738	29.179	-6.073	-3.081	1.00	26.28
	ATOM	2437	CD2	HIS	1738	29.727	-5.437	-4.147	1.00	25.67
	ATOM	2438	ND1	HIS	1738	29.697	-7.352	-3.098	1.00	27.55
	ATOM	2440	CE1	HIS	1738	30.528	-7.478	-4.117	1.00	27.51
	ATOM	2441	NE2	HIS	1738	30.564	-6.329	-4.770	1.00	30.93
15	ATOM	2443	C	HIS	1738	28.715	-3.087	-1.953	1.00	25.59
	ATOM	2444	O	HIS	1738	27.659	-2.451	-1.905	1.00	22.01
	ATOM	2445	N	ALA	1739	29.784	-2.651	-2.612	1.00	23.84
	ATOM	2447	CA	ALA	1739	29.759	-1.418	-3.388	1.00	24.93
	ATOM	2448	CB	ALA	1739	31.131	-1.177	-4.024	1.00	26.39
	ATOM	2449	C	ALA	1739	28.671	-1.508	-4.462	1.00	25.35
	ATOM	2450	O	ALA	1739	27.963	-0.535	-4.727	1.00	28.20
	ATOM	2451	N	VAL	1740	28.543	-2.680	-5.073	1.00	22.68
	ATOM	2453	CA	VAL	1740	27.528	-2.904	-6.101	1.00	26.46
20	ATOM	2454	CB	VAL	1740	27.995	-3.968	-7.117	1.00	29.70
	ATOM	2455	CG1	VAL	1740	27.063	-4.003	-8.334	1.00	26.01
	ATOM	2456	CG2	VAL	1740	29.433	-3.686	-7.537	1.00	31.22
	ATOM	2457	C	VAL	1740	26.213	-3.358	-5.443	1.00	25.07
	ATOM	2458	O	VAL	1740	26.138	-4.474	-4.903	1.00	23.55
	ATOM	2459	N	PRO	1741	25.155	-2.519	-5.514	1.00	25.30
	ATOM	2460	CD	PRO	1741	25.133	-1.190	-6.153	1.00	22.43
	ATOM	2461	CA	PRO	1741	23.844	-2.833	-4.921	1.00	24.09
	ATOM	2462	CB	PRO	1741	22.962	-1.675	-5.402	1.00	23.12
25	ATOM	2463	CG	PRO	1741	23.928	-0.527	-5.491	1.00	22.04
	ATOM	2464	C	PRO	1741	23.272	-4.191	-5.313	1.00	22.18
	ATOM	2465	O	PRO	1741	22.727	-4.900	-4.466	1.00	21.23
	ATOM	2466	N	SER	1742	23.437	-4.570	-6.580	1.00	23.87
	ATOM	2468	CA	SER	1742	22.928	-5.847	-7.088	1.00	24.36
	ATOM	2469	CB	SER	1742	23.071	-5.907	-8.612	1.00	27.39
	ATOM	2470	OG	SER	1742	24.436	-6.025	-8.986	1.00	29.25
	ATOM	2472	C	SER	1742	23.636	-7.058	-6.488	1.00	23.96
	ATOM	2473	O	SER	1742	23.145	-8.179	-6.575	1.00	24.30
30	ATOM	2474	N	GLN	1743	24.810	-6.839	-5.915	1.00	24.39
	ATOM	2476	CA	GLN	1743	25.558	-7.934	-5.345	1.00	23.15
	ATOM	2477	CB	GLN	1743	27.046	-7.755	-5.638	1.00	23.83
	ATOM	2478	CG	GLN	1743	27.359	-7.784	-7.126	1.00	22.84
	ATOM	2479	CD	GLN	1743	26.816	-9.036	-7.808	1.00	24.20
	ATOM	2480	OE1	GLN	1743	27.318	-10.135	-7.590	1.00	21.50
	ATOM	2481	NE2	GLN	1743	25.775	-8.871	-8.628	1.00	22.45
	ATOM	2484	C	GLN	1743	25.309	-8.171	-3.868	1.00	23.12
	ATOM	2485	O	GLN	1743	25.816	-9.135	-3.317	1.00	24.96
35	ATOM	2486	N	ARG	1744	24.557	-7.280	-3.225	1.00	23.67
	ATOM	2488	CA	ARG	1744	24.242	-7.424	-1.806	1.00	22.11
	ATOM	2489	CB	ARG	1744	23.699	-6.110	-1.231	1.00	19.70
	ATOM	2490	CG	ARG	1744	24.672	-4.959	-1.338	1.00	21.26
	ATOM	2491	CD	ARG	1744	24.049	-3.640	-0.890	1.00	20.68

	ATOM	2492	NE	ARG	1744	24.923	-2.552	-1.305	1.00	25.21
	ATOM	2494	CZ	ARG	1744	24.540	-1.313	-1.583	1.00	24.30
	ATOM	2495	NH1	ARG	1744	23.257	-0.955	-1.481	1.00	22.04
	ATOM	2498	NH2	ARG	1744	25.450	-0.448	-2.036	1.00	21.29
	ATOM	2501	C	ARG	1744	23.184	-8.505	-1.640	1.00	22.53
	ATOM	2502	O	ARG	1744	22.437	-8.800	-2.588	1.00	23.08
	ATOM	2503	N	PRO	1745	23.162	-9.170	-0.467	1.00	20.76
5	ATOM	2504	CD	PRO	1745	24.087	-9.078	0.681	1.00	21.71
	ATOM	2505	CA	PRO	1745	22.160	-10.207	-0.243	1.00	22.34
	ATOM	2506	CB	PRO	1745	22.632	-10.859	1.057	1.00	20.58
	ATOM	2507	CG	PRO	1745	23.298	-9.727	-1.783	1.00	20.36
	ATOM	2508	C	PRO	1745	20.814	-9.512	-0.048	1.00	23.62
	ATOM	2509	O	PRO	1745	20.759	-8.318	0.255	1.00	25.29
	ATOM	2510	N	THR	1746	19.731	-10.235	-0.275	1.00	23.39
	ATOM	2512	CA	THR	1746	18.404	-9.675	-0.080	1.00	22.77
	ATOM	2513	CB	THR	1746	17.386	-10.368	-1.004	1.00	23.24
10	ATOM	2514	OG1	THR	1746	17.409	-11.783	-0.763	1.00	23.11
	ATOM	2516	CG2	THR	1746	17.724	-10.103	-2.475	1.00	24.96
	ATOM	2517	C	THR	1746	18.009	-9.954	1.365	1.00	24.98
	ATOM	2518	O	THR	1746	18.664	-10.758	2.043	1.00	24.30
	ATOM	2519	N	PHE	1747	16.944	-9.318	1.853	1.00	24.95
	ATOM	2521	CA	PHE	1747	16.501	-9.596	3.221	1.00	25.16
	ATOM	2522	CB	PHE	1747	15.395	-8.628	3.661	1.00	23.64
	ATOM	2523	CG	PHE	1747	15.916	-7.283	4.089	1.00	24.34
	ATOM	2524	CD1	PHE	1747	16.715	-7.167	5.226	1.00	21.21
15	ATOM	2525	CD2	PHE	1747	15.649	-6.137	3.334	1.00	21.42
	ATOM	2526	CE1	PHE	1747	17.252	-5.932	5.597	1.00	20.99
	ATOM	2527	CE2	PHE	1747	16.178	-4.907	3.699	1.00	20.36
	ATOM	2528	CZ	PHE	1747	16.985	-4.807	4.840	1.00	19.30
	ATOM	2529	C	PHE	1747	16.034	-11.049	3.311	1.00	23.57
	ATOM	2530	O	PHE	1747	16.182	-11.702	4.344	1.00	25.32
	ATOM	2531	N	LYS	1748	15.520	-11.573	2.202	1.00	23.19
	ATOM	2533	CA	LYS	1748	15.066	-12.958	2.167	1.00	23.67
	ATOM	2534	CB	LYS	1748	14.462	-13.285	0.799	1.00	26.67
20	ATOM	2535	CG	LYS	1748	14.018	-14.739	0.622	1.00	30.49
	ATOM	2536	CD	LYS	1748	13.642	-14.996	-0.837	1.00	38.98
	ATOM	2537	CE	LYS	1748	13.182	-16.432	-1.087	1.00	44.52
	ATOM	2538	NZ	LYS	1748	11.997	-16.790	-0.245	1.00	52.75
	ATOM	2542	C	LYS	1748	16.264	-13.865	2.445	1.00	25.65
	ATOM	2543	O	LYS	1748	16.184	-14.778	3.270	1.00	27.19
	ATOM	2544	N	GLN	1749	17.378	-13.603	1.762	1.00	24.56
	ATOM	2546	CA	GLN	1749	18.588	-14.397	1.950	1.00	26.33
	ATOM	2547	CB	GLN	1749	19.702	-13.953	0.993	1.00	27.97
25	ATOM	2548	CG	GLN	1749	19.416	-14.066	-0.484	1.00	37.31
	ATOM	2549	CD	GLN	1749	20.518	-13.415	-1.315	1.00	40.24
	ATOM	2550	OE1	GLN	1749	20.296	-12.408	-1.970	1.00	38.83
	ATOM	2551	NE2	GLN	1749	21.726	-13.983	-1.259	1.00	47.83
	ATOM	2554	C	GLN	1749	19.099	-14.223	3.377	1.00	23.92
	ATOM	2555	O	GLN	1749	19.459	-15.196	4.040	1.00	25.27
	ATOM	2556	N	LEU	1750	19.155	-12.976	3.829	1.00	23.12
	ATOM	2558	CA	LEU	1750	19.641	-12.662	5.175	1.00	24.34
	ATOM	2559	CB	LEU	1750	19.607	-11.149	5.427	1.00	23.08
30	ATOM	2560	CG	LEU	1750	20.633	-10.311	4.665	1.00	23.84
	ATOM	2561	CD1	LEU	1750	20.274	-8.806	4.724	1.00	22.10
	ATOM	2562	CD2	LEU	1750	22.013	-10.586	5.246	1.00	24.91
	ATOM	2563	C	LEU	1750	18.840	-13.400	6.236	1.00	27.40
	ATOM	2564	O	LEU	1750	19.408	-13.915	7.211	1.00	27.11
	ATOM	2565	N	VAL	1751	17.527	-13.482	6.031	1.00	26.83
	ATOM	2567	CA	VAL	1751	16.665	-14.174	6.970	1.00	25.31
	ATOM	2568	CB	VAL	1751	15.176	-13.994	6.599	1.00	25.87
	ATOM	2569	CG1	VAL	1751	14.304	-14.975	7.382	1.00	28.43
35	ATOM	2570	CG2	VAL	1751	14.746	-12.593	6.934	1.00	21.52
	ATOM	2571	C	VAL	1751	17.047	-15.642	7.025	1.00	25.87
	ATOM	2572	O	VAL	1751	17.178	-16.218	8.106	1.00	23.41
	ATOM	2573	N	GLU	1752	17.253	-16.243	5.858	1.00	29.98
	ATOM	2575	CA	GLU	1752	17.631	-17.651	5.799	1.00	33.12

	ATOM	2576	CB	GLU	1752	17.653	-18.134	4.346	1.00	35.99
	ATOM	2577	CG	GLU	1752	16.284	-18.077	3.670	1.00	43.58
	ATOM	2578	CD	GLU	1752	16.300	-18.575	2.230	1.00	48.64
	ATOM	2579	OE1	GLU	1752	15.453	-18.124	1.431	1.00	48.99
	ATOM	2580	OE2	GLU	1752	17.157	-19.426	1.902	1.00	55.41
	ATOM	2581	C	GLU	1752	18.995	-17.891	6.467	1.00	33.15
	ATOM	2582	O	GLU	1752	19.173	-18.847	7.236	1.00	30.71
5	ATOM	2583	N	ASP	1753	19.951	-17.011	6.186	1.00	31.12
	ATOM	2585	CA	ASP	1753	21.279	-17.131	6.770	1.00	30.51
	ATOM	2586	CB	ASP	1753	22.243	-16.108	6.155	1.00	29.15
	ATOM	2587	CG	ASP	1753	22.488	-16.344	4.672	1.00	33.53
	ATOM	2588	OD1	ASP	1753	22.361	-17.494	4.215	1.00	34.92
	ATOM	2589	OD2	ASP	1753	22.815	-15.371	3.955	1.00	38.26
	ATOM	2590	C	ASP	1753	21.215	-16.968	8.287	1.00	28.54
	ATOM	2591	O	ASP	1753	21.739	-17.800	9.025	1.00	28.95
	ATOM	2592	N	LEU	1754	20.537	-15.926	8.753	1.00	27.25
10	ATOM	2594	CA	LEU	1754	20.421	-15.673	10.193	1.00	28.08
	ATOM	2595	CB	LEU	1754	19.754	-14.328	10.455	1.00	23.31
	ATOM	2596	CG	LEU	1754	20.733	-13.199	10.160	1.00	24.47
	ATOM	2597	CD1	LEU	1754	20.007	-11.863	10.094	1.00	19.58
	ATOM	2598	CD2	LEU	1754	21.846	-13.207	11.216	1.00	21.17
	ATOM	2599	C	LEU	1754	19.688	-16.789	10.921	1.00	31.61
	ATOM	2600	O	LEU	1754	20.037	-17.135	12.048	1.00	32.64
	ATOM	2601	N	ASP	1755	18.690	-17.367	10.259	1.00	32.61
15	ATOM	2603	CA	ASP	1755	17.931	-18.460	10.833	1.00	34.20
	ATOM	2604	CB	ASP	1755	16.823	-18.883	9.872	1.00	37.70
	ATOM	2605	CG	ASP	1755	15.808	-19.780	10.526	1.00	44.27
	ATOM	2606	OD1	ASP	1755	15.445	-19.521	11.692	1.00	47.16
	ATOM	2607	OD2	ASP	1755	15.370	-20.745	9.876	1.00	51.35
	ATOM	2608	C	ASP	1755	18.894	-19.616	11.073	1.00	34.63
	ATOM	2609	O	ASP	1755	18.858	-20.273	12.119	1.00	36.24
	ATOM	2610	N	ARG	1756	19.782	-19.826	10.108	1.00	32.60
	ATOM	2612	CA	ARG	1756	20.784	-20.870	10.190	1.00	33.69
	ATOM	2613	CB	ARG	1756	21.548	-20.939	8.867	1.00	35.42
20	ATOM	2614	CG	ARG	1756	22.639	-22.003	8.800	1.00	40.87
	ATOM	2615	CD	ARG	1756	23.212	-22.094	7.395	1.00	42.73
	ATOM	2616	NE	ARG	1756	23.739	-20.813	6.926	1.00	48.45
	ATOM	2618	CZ	ARG	1756	24.882	-20.274	7.340	1.00	49.90
	ATOM	2619	NH1	ARG	1756	25.634	-20.905	8.243	1.00	49.63
	ATOM	2622	NH2	ARG	1756	25.276	-19.105	6.844	1.00	50.86
	ATOM	2625	C	ARG	1756	21.748	-20.598	11.345	1.00	34.78
	ATOM	2626	O	ARG	1756	21.929	-21.436	12.228	1.00	36.24
	ATOM	2627	N	ILE	1757	22.325	-19.402	11.363	1.00	35.35
25	ATOM	2629	CA	ILE	1757	23.281	-19.018	12.392	1.00	35.54
	ATOM	2630	CB	ILE	1757	23.905	-17.631	12.103	1.00	34.99
	ATOM	2631	CG2	ILE	1757	24.955	-17.303	13.159	1.00	32.06
	ATOM	2632	CG1	ILE	1757	24.547	-17.626	10.711	1.00	33.77
	ATOM	2633	CD1	ILE	1757	24.908	-16.247	10.185	1.00	31.44
	ATOM	2634	C	ILE	1757	22.698	-19.036	13.803	1.00	36.49
	ATOM	2635	O	ILE	1757	23.337	-19.548	14.716	1.00	36.40
	ATOM	2636	N	VAL	1758	21.487	-18.515	13.988	1.00	36.91
	ATOM	2638	CA	VAL	1758	20.881	-18.498	15.322	1.00	38.68
30	ATOM	2639	CB	VAL	1758	19.425	-17.962	15.312	1.00	37.77
	ATOM	2640	CG1	VAL	1758	18.806	-18.059	16.708	1.00	38.39
	ATOM	2641	CG2	VAL	1758	19.392	-16.524	14.854	1.00	36.69
	ATOM	2642	C	VAL	1758	20.891	-19.908	15.895	1.00	41.38
	ATOM	2643	O	VAL	1758	21.405	-20.138	16.997	1.00	42.41
	ATOM	2644	N	ALA	1759	20.379	-20.851	15.111	1.00	40.59
	ATOM	2646	CA	ALA	1759	20.325	-22.247	15.508	1.00	40.84
	ATOM	2647	CB	ALA	1759	19.741	-23.074	14.384	1.00	40.20
	ATOM	2648	C	ALA	1759	21.703	-22.787	15.897	1.00	42.52
35	ATOM	2649	O	ALA	1759	21.822	-23.594	16.809	1.00	44.78
	ATOM	2650	N	LEU	1760	22.740	-22.339	15.208	1.00	43.16
	ATOM	2652	CA	LEU	1760	24.095	-22.800	15.493	1.00	46.98
	ATOM	2653	CB	LEU	1760	24.921	-22.761	14.203	1.00	47.66
	ATOM	2654	CG	LEU	1760	24.286	-23.545	13.060	1.00	52.77

	ATOM	2655	CD1	LEU	1760	24.973	-23.222	11.745	1.00	56.58
	ATOM	2656	CD2	LEU	1760	24.343	-25.038	13.369	1.00	53.06
	ATOM	2657	C	LEU	1760	24.811	-21.986	16.573	1.00	47.43
	ATOM	2658	O	LEU	1760	25.917	-22.335	16.989	1.00	46.58
	ATOM	2659	N	THR	1761	24.183	-20.914	17.034	1.00	48.65
	ATOM	2661	CA	THR	1761	24.814	-20.055	18.021	1.00	49.69
	ATOM	2662	CB	THR	1761	24.382	-18.570	17.831	1.00	50.15
5	ATOM	2663	OG1	THR	1761	24.783	-18.127	16.529	1.00	49.87
	ATOM	2665	CG2	THR	1761	25.063	-17.671	18.843	1.00	48.64
	ATOM	2666	C	THR	1761	24.673	-20.497	19.475	1.00	50.33
	ATOM	2667	O	THR	1761	23.584	-20.825	19.947	1.00	48.81
	ATOM	2668	N	SER	1762	25.811	-20.511	20.166	1.00	50.25
	ATOM	2670	CA	SER	1762	25.891	-20.890	21.566	1.00	50.98
	ATOM	2671	CB	SER	1762	27.362	-20.887	22.002	1.00	54.71
	ATOM	2672	OG	SER	1762	27.537	-21.423	23.308	1.00	57.99
	ATOM	2674	C	SER	1762	25.083	-19.914	22.425	1.00	49.39
10	ATOM	2675	O	SER	1762	25.297	-18.694	22.370	1.00	48.00
	ATOM	3474	N	SER	461	79.623	25.766	14.533	1.00	48.84
	ATOM	3476	CA	SER	461	79.566	24.645	13.593	1.00	46.93
	ATOM	3477	CB	SER	461	78.276	23.838	13.809	1.00	46.66
	ATOM	3478	C	SER	461	79.676	25.114	12.138	1.00	43.02
	ATOM	3479	O	SER	461	79.692	24.301	11.210	1.00	40.19
	ATOM	3480	N	GLU	462	79.791	26.427	11.956	1.00	41.48
	ATOM	3482	CA	GLU	462	79.904	27.034	10.628	1.00	39.59
	ATOM	3483	CB	GLU	462	80.021	28.560	10.744	1.00	40.66
15	ATOM	3484	C	GLU	462	81.054	26.480	9.796	1.00	36.60
	ATOM	3485	O	GLU	462	80.852	26.121	8.641	1.00	35.10
	ATOM	3486	N	TYR	463	82.252	26.416	10.380	1.00	36.07
	ATOM	3488	CA	TYR	463	83.430	25.916	9.673	1.00	35.60
	ATOM	3489	CB	TYR	463	84.597	26.906	9.755	1.00	38.15
	ATOM	3490	CG	TYR	463	84.372	28.104	8.861	1.00	44.08
	ATOM	3491	CD1	TYR	463	84.137	29.368	9.406	1.00	44.99
	ATOM	3492	CE1	TYR	463	83.633	30.451	8.593	1.00	46.88
	ATOM	3493	CD2	TYR	463	84.305	27.959	7.464	1.00	43.95
20	ATOM	3494	CE2	TYR	463	84.003	29.044	6.642	1.00	41.86
	ATOM	3495	CZ	TYR	463	83.768	30.282	7.215	1.00	43.89
	ATOM	3496	OH	TYR	463	83.468	31.364	6.431	1.00	44.37
	ATOM	3498	C	TYR	463	83.903	24.520	10.014	1.00	33.90
	ATOM	3499	O	TYR	463	84.440	23.828	9.147	1.00	33.90
	ATOM	3500	N	GLU	464	83.742	24.098	11.260	1.00	32.81
	ATOM	3502	CA	GLU	464	84.167	22.753	11.633	1.00	34.64
	ATOM	3503	CB	GLU	464	85.663	22.727	11.919	1.00	37.48
	ATOM	3504	CG	GLU	464	86.075	23.633	13.049	1.00	45.48
25	ATOM	3505	CD	GLU	464	87.552	23.987	13.015	1.00	55.80
	ATOM	3506	OE1	GLU	464	87.920	24.996	13.659	1.00	61.78
	ATOM	3507	OE2	GLU	464	88.344	23.271	12.351	1.00	58.34
	ATOM	3508	C	GLU	464	83.426	22.296	12.858	1.00	33.05
	ATOM	3509	O	GLU	464	83.083	23.119	13.705	1.00	34.54
	ATOM	3510	N	LEU	465	83.147	21.001	12.943	1.00	32.59
	ATOM	3512	CA	LEU	465	82.462	20.463	14.114	1.00	33.74
	ATOM	3513	CB	LEU	465	81.484	19.341	13.747	1.00	31.20
	ATOM	3514	CG	LEU	465	80.510	19.433	12.577	1.00	32.77
30	ATOM	3515	CD1	LEU	465	79.355	18.492	12.858	1.00	26.22
	ATOM	3516	CD2	LEU	465	80.021	20.846	12.359	1.00	31.59
	ATOM	3517	C	LEU	465	83.511	19.889	15.059	1.00	35.64
	ATOM	3518	O	LEU	465	84.641	19.574	14.642	1.00	33.77
	ATOM	3519	N	PRO	466	83.150	19.734	16.349	1.00	36.71
	ATOM	3520	CD	PRO	466	81.865	20.104	16.967	1.00	36.97
	ATOM	3521	CA	PRO	466	84.074	19.185	17.346	1.00	36.17
	ATOM	3522	CB	PRO	466	83.247	19.196	18.626	1.00	36.83
	ATOM	3523	CG	PRO	466	82.274	20.326	18.394	1.00	40.80
35	ATOM	3524	C	PRO	466	84.419	17.765	16.950	1.00	37.39
	ATOM	3525	O	PRO	466	83.626	17.077	16.297	1.00	34.71
	ATOM	3526	N	GLU	467	85.611	17.330	17.315	1.00	38.40
	ATOM	3528	CA	GLU	467	86.030	15.987	16.976	1.00	42.59
	ATOM	3529	CB	GLU	467	87.493	15.987	16.540	1.00	49.21

	ATOM	3530	CG	GLU	467	87.922	14.682	15.891	1.00	58.93
	ATOM	3531	CD	GLU	467	89.276	14.769	15.213	1.00	64.76
	ATOM	3532	OE1	GLU	467	90.013	15.767	15.426	1.00	63.57
	ATOM	3533	OE2	GLU	467	89.592	13.823	14.458	1.00	69.03
	ATOM	3534	C	GLU	467	85.825	15.037	18.146	1.00	40.74
	ATOM	3535	O	GLU	467	85.938	15.430	19.309	1.00	41.52
	ATOM	3536	N	ASP	468	85.472	13.802	17.831	1.00	38.57
5	ATOM	3538	CA	ASP	468	85.273	12.776	18.851	1.00	40.86
	ATOM	3539	CB	ASP	468	83.793	12.640	19.224	1.00	40.27
	ATOM	3540	CG	ASP	468	83.566	11.697	20.397	1.00	41.36
	ATOM	3541	OD1	ASP	468	82.429	11.670	20.919	1.00	42.50
	ATOM	3542	OD2	ASP	468	84.514	10.992	20.807	1.00	38.55
	ATOM	3543	C	ASP	468	85.803	11.470	18.278	1.00	40.75
	ATOM	3544	O	ASP	468	85.068	10.701	17.650	1.00	41.80
	ATOM	3545	N	PRO	469	87.100	11.209	18.481	1.00	41.71
10	ATOM	3546	CD	PRO	469	88.001	12.062	19.276	1.00	41.87
	ATOM	3547	CA	PRO	469	87.801	10.011	18.012	1.00	40.07
	ATOM	3548	CB	PRO	469	89.091	10.042	18.831	1.00	40.42
	ATOM	3549	CG	PRO	469	89.366	11.505	18.938	1.00	39.42
	ATOM	3550	C	PRO	469	87.033	8.720	18.260	1.00	41.00
	ATOM	3551	O	PRO	469	87.032	7.822	17.414	1.00	41.75
	ATOM	3552	N	ARG	470	86.361	8.639	19.411	1.00	40.70
	ATOM	3554	CA	ARG	470	85.600	7.446	19.779	1.00	41.03
	ATOM	3555	CB	ARG	470	84.827	7.677	21.075	1.00	44.18
15	ATOM	3556	CG	ARG	470	85.628	8.240	22.218	1.00	47.89
	ATOM	3557	CD	ARG	470	84.719	8.518	23.400	1.00	50.56
	ATOM	3558	NE	ARG	470	83.576	9.345	23.023	1.00	51.20
	ATOM	3560	CZ	ARG	470	82.695	9.845	23.881	1.00	52.24
	ATOM	3561	NH1	ARG	470	82.818	9.608	25.183	1.00	51.31
	ATOM	3564	NH2	ARG	470	81.672	10.564	23.432	1.00	52.73
	ATOM	3567	C	ARG	470	84.596	7.004	18.723	1.00	39.03
	ATOM	3568	O	ARG	470	84.401	5.813	18.518	1.00	40.72
	ATOM	3569	N	TRP	471	83.972	7.965	18.050	1.00	37.77
20	ATOM	3571	CA	TRP	471	82.948	7.656	17.059	1.00	36.73
	ATOM	3572	CB	TRP	471	81.672	8.401	17.432	1.00	35.05
	ATOM	3573	CG	TRP	471	81.044	7.862	18.673	1.00	34.85
	ATOM	3574	CD2	TRP	471	80.235	5.687	18.766	1.00	34.96
	ATOM	3575	CE2	TRP	471	79.831	6.564	20.116	1.00	35.12
	ATOM	3576	CE3	TRP	471	79.810	5.721	17.838	1.00	33.25
	ATOM	3577	CD1	TRP	471	81.106	8.390	19.933	1.00	29.97
	ATOM	3578	NE1	TRP	471	80.377	7.616	20.805	1.00	32.18
	ATOM	3580	CZ2	TRP	471	79.017	5.512	20.560	1.00	33.98
25	ATOM	3581	CZ3	TRP	471	79.002	4.673	18.282	1.00	33.71
	ATOM	3582	CH2	TRP	471	78.618	4.580	19.632	1.00	33.28
	ATOM	3583	C	TRP	471	83.275	7.930	15.599	1.00	37.27
	ATOM	3584	O	TRP	471	82.580	7.445	14.695	1.00	36.61
	ATOM	3585	N	GLU	472	84.341	8.680	15.361	1.00	37.93
	ATOM	3587	CA	GLU	472	84.706	9.054	14.004	1.00	37.08
	ATOM	3588	CB	GLU	472	85.865	10.049	14.045	1.00	36.30
	ATOM	3589	CG	GLU	472	86.026	10.851	12.773	1.00	33.51
	ATOM	3590	CD	GLU	472	84.931	11.895	12.580	1.00	33.80
30	ATOM	3591	OE1	GLU	472	84.385	12.408	13.581	1.00	35.19
	ATOM	3592	OE2	GLU	472	84.641	12.226	11.412	1.00	32.51
	ATOM	3593	C	GLU	472	85.021	7.923	13.032	1.00	37.88
	ATOM	3594	O	GLU	472	85.774	7.000	13.351	1.00	38.20
	ATOM	3595	N	LEU	473	84.422	7.992	11.846	1.00	37.55
	ATOM	3597	CA	LEU	473	84.678	7.004	10.813	1.00	36.93
	ATOM	3598	CB	LEU	473	83.404	6.244	10.443	1.00	37.08
	ATOM	3599	CG	LEU	473	83.680	5.086	9.470	1.00	39.14
	ATOM	3600	CD1	LEU	473	84.196	3.877	10.250	1.00	38.39
35	ATOM	3601	CD2	LEU	473	82.433	4.716	8.672	1.00	39.46
	ATOM	3602	C	LEU	473	85.207	7.732	9.577	1.00	38.52
	ATOM	3603	O	LEU	473	84.660	8.764	9.182	1.00	38.67
	ATOM	3604	N	PRO	474	86.334	7.259	9.005	1.00	39.02
	ATOM	3605	CD	PRO	474	87.259	6.259	9.571	1.00	38.39
	ATOM	3606	CA	PRO	474	86.918	7.877	7.809	1.00	38.24

	ATOM	3607	CB	PRO	474	88.188	7.049	7.590	1.00	38.40
	ATOM	3608	CG	PRO	474	88.580	6.680	8.979	1.00	35.50
	ATOM	3609	C	PRO	474	85.942	7.727	6.642	1.00	37.56
	ATOM	3610	O	PRO	474	85.415	6.641	6.400	1.00	37.88
	ATOM	3611	N	ARG	475	85.720	8.809	5.907	1.00	37.73
	ATOM	3613	CA	ARG	475	84.779	8.790	4.795	1.00	40.01
	ATOM	3614	CB	ARG	475	84.655	10.183	4.182	1.00	38.31
5	ATOM	3615	CG	ARG	475	84.217	11.236	5.198	1.00	35.15
	ATOM	3616	CD	ARG	475	84.069	12.631	4.586	1.00	33.92
	ATOM	3617	NE	ARG	475	83.718	13.603	5.616	1.00	30.45
	ATOM	3619	CZ	ARG	475	82.475	13.880	5.993	1.00	26.48
	ATOM	3620	NH1	ARG	475	81.444	13.284	5.407	1.00	24.80
	ATOM	3623	NH2	ARG	475	82.271	14.650	7.056	1.00	25.16
	ATOM	3626	C	ARG	475	85.054	7.735	3.728	1.00	42.18
	ATOM	3627	O	ARG	475	84.125	7.197	3.128	1.00	41.43
	ATOM	3628	N	ASP	476	86.322	7.391	3.535	1.00	45.44
10	ATOM	3630	CA	ASP	476	86.676	6.387	2.541	1.00	49.80
	ATOM	3631	CB	ASP	476	88.192	6.343	2.329	1.00	50.95
	ATOM	3632	CG	ASP	476	88.944	5.975	3.585	1.00	53.89
	ATOM	3633	OD1	ASP	476	89.303	4.789	3.731	1.00	59.71
	ATOM	3634	OD2	ASP	476	89.176	6.867	4.427	1.00	57.39
	ATOM	3635	C	ASP	476	86.149	5.010	2.950	1.00	51.23
	ATOM	3636	O	ASP	476	86.051	4.102	2.121	1.00	53.54
	ATOM	3637	N	ARG	477	85.814	4.864	4.230	1.00	50.49
	ATOM	3639	CA	ARG	477	85.285	3.610	4.753	1.00	49.32
15	ATOM	3640	CB	ARG	477	85.834	3.364	6.152	1.00	49.79
	ATOM	3641	CG	ARG	477	87.237	2.806	6.112	1.00	53.06
	ATOM	3642	CD	ARG	477	87.960	2.981	7.420	1.00	56.76
	ATOM	3643	NE	ARG	477	87.310	2.293	8.529	1.00	59.35
	ATOM	3645	CZ	ARG	477	87.728	2.371	9.789	1.00	62.23
	ATOM	3646	NH1	ARG	477	88.793	3.103	10.101	1.00	63.66
	ATOM	3649	NH2	ARG	477	87.067	1.741	10.745	1.00	64.35
	ATOM	3652	C	ARG	477	83.755	3.547	4.756	1.00	48.04
	ATOM	3653	O	ARG	477	83.160	2.693	5.404	1.00	48.09
20	ATOM	3654	N	LEU	478	83.129	4.412	3.958	1.00	45.38
	ATOM	3656	CA	LEU	478	81.685	4.469	3.870	1.00	41.60
	ATOM	3657	CB	LEU	478	81.168	5.578	4.790	1.00	39.39
	ATOM	3658	CG	LEU	478	79.651	5.699	4.894	1.00	36.38
	ATOM	3659	CD1	LEU	478	79.113	4.595	5.802	1.00	33.98
	ATOM	3660	CD2	LEU	478	79.293	7.068	5.441	1.00	40.06
	ATOM	3661	C	LEU	478	81.279	4.774	2.433	1.00	41.92
	ATOM	3662	O	LEU	478	81.696	5.780	1.870	1.00	43.99
	ATOM	3663	N	VAL	479	80.466	3.904	1.844	1.00	42.29
25	ATOM	3665	CA	VAL	479	79.992	4.082	0.471	1.00	41.07
	ATOM	3666	CB	VAL	479	80.227	2.816	-0.397	1.00	41.13
	ATOM	3667	CG1	VAL	479	79.719	3.057	-1.810	1.00	40.19
	ATOM	3668	CG2	VAL	479	81.700	2.448	-0.420	1.00	41.36
	ATOM	3669	C	VAL	479	78.500	4.345	0.540	1.00	40.44
	ATOM	3670	O	VAL	479	77.719	3.451	0.885	1.00	39.86
	ATOM	3671	N	LEU	480	78.112	5.582	0.253	1.00	41.37
	ATOM	3673	CA	LEU	480	76.706	5.973	0.293	1.00	41.63
	ATOM	3674	CB	LEU	480	76.568	7.492	0.166	1.00	39.91
30	ATOM	3675	CG	LEU	480	77.236	8.332	1.261	1.00	39.23
	ATOM	3676	CD1	LEU	480	76.890	9.800	1.039	1.00	37.73
	ATOM	3677	CD2	LEU	480	76.791	7.877	2.647	1.00	35.18
	ATOM	3678	C	LEU	480	75.899	5.273	-0.788	1.00	42.21
	ATOM	3679	O	LEU	480	76.395	5.048	-1.890	1.00	45.27
	ATOM	3680	N	GLY	481	74.650	4.947	-0.476	1.00	41.51
	ATOM	3682	CA	GLY	481	73.812	4.257	-1.433	1.00	40.19
	ATOM	3683	C	GLY	481	72.446	4.872	-1.640	1.00	41.58
	ATOM	3684	O	GLY	481	72.262	6.091	-1.550	1.00	41.35
35	ATOM	3685	N	LYS	482	71.474	4.009	-1.908	1.00	42.65
	ATOM	3687	CA	LYS	482	70.105	4.429	-2.166	1.00	44.17
	ATOM	3688	CB	LYS	482	69.240	3.221	-2.542	1.00	45.66
	ATOM	3689	C	LYS	482	69.475	5.148	-0.994	1.00	44.86
	ATOM	3690	O	LYS	482	69.638	4.752	0.155	1.00	45.23

	ATOM	3691	N	PRO	483	68.749	6.234	-1.273	1.00	45.94
	ATOM	3692	CD	PRO	483	68.518	6.880	-2.576	1.00	46.96
	ATOM	3693	CA	PRO	483	68.099	6.983	-0.206	1.00	47.79
	ATOM	3694	CB	PRO	483	67.542	8.200	-0.947	1.00	47.02
	ATOM	3695	CG	PRO	483	67.269	7.666	-2.307	1.00	46.65
	ATOM	3696	C	PRO	483	66.991	6.151	0.429	1.00	48.74
	ATOM	3697	O	PRO	483	66.314	5.376	-0.251	1.00	48.01
5	ATOM	3698	N	LEU	484	66.858	6.268	1.742	1.00	49.91
	ATOM	3700	CA	LEU	484	65.837	5.547	2.477	1.00	53.93
	ATOM	3701	CB	LEU	484	66.433	4.883	3.720	1.00	50.17
	ATOM	3702	CG	LEU	484	67.517	3.844	3.445	1.00	48.93
	ATOM	3703	CD1	LEU	484	68.226	3.460	4.731	1.00	49.05
	ATOM	3704	CD2	LEU	484	66.906	2.630	2.784	1.00	47.03
	ATOM	3705	C	LEU	484	64.715	6.501	2.878	1.00	58.70
	ATOM	3706	O	LEU	484	63.571	6.075	3.055	1.00	61.95
	ATOM	3707	N	GLY	485	65.027	7.788	3.006	1.00	60.35
10	ATOM	3709	CA	GLY	485	63.998	8.737	3.397	1.00	64.00
	ATOM	3710	C	GLY	485	64.445	10.183	3.476	1.00	66.09
	ATOM	3711	O	GLY	485	65.643	10.468	3.577	1.00	65.26
	ATOM	3712	N	GLU	486	63.471	11.090	3.458	1.00	67.18
	ATOM	3714	CA	GLU	486	63.733	12.525	3.508	1.00	68.69
	ATOM	3715	CB	GLU	486	63.873	13.084	2.091	1.00	69.88
	ATOM	3716	C	GLU	486	62.618	13.249	4.245	1.00	68.80
	ATOM	3717	O	GLU	486	61.481	12.775	4.295	1.00	69.26
	ATOM	3718	N	GLY	487	62.943	14.415	4.791	1.00	68.47
15	ATOM	3720	CA	GLY	487	61.960	15.188	5.520	1.00	67.56
	ATOM	3721	C	GLY	487	62.373	16.635	5.634	1.00	66.71
	ATOM	3722	O	GLY	487	63.040	17.172	4.747	1.00	66.48
	ATOM	3723	N	ALA	488	61.979	17.265	6.735	1.00	67.22
	ATOM	3725	CA	ALA	488	62.304	18.661	6.992	1.00	67.78
	ATOM	3726	CB	ALA	488	61.637	19.121	8.283	1.00	68.97
	ATOM	3727	C	ALA	488	63.817	18.830	7.085	1.00	67.38
	ATOM	3728	O	ALA	488	64.413	18.597	8.141	1.00	67.14
	ATOM	3729	N	PHE	489	64.429	19.155	5.946	1.00	66.22
20	ATOM	3731	CA	PHE	489	65.877	19.364	5.831	1.00	65.49
	ATOM	3732	CB	PHE	489	66.277	20.699	6.467	1.00	66.11
	ATOM	3733	C	PHE	489	66.749	18.207	6.368	1.00	64.07
	ATOM	3734	O	PHE	489	67.924	18.399	6.731	1.00	61.56
	ATOM	3735	N	GLY	490	66.171	17.005	6.349	1.00	60.79
	ATOM	3737	CA	GLY	490	66.852	15.803	6.797	1.00	54.72
	ATOM	3738	C	GLY	490	66.787	14.760	5.692	1.00	51.78
	ATOM	3739	O	GLY	490	65.765	14.624	5.013	1.00	49.17
	ATOM	3740	N	GLN	491	67.874	14.015	5.528	1.00	49.97
25	ATOM	3742	CA	GLN	491	68.000	12.984	4.504	1.00	48.06
	ATOM	3743	CB	GLN	491	68.891	13.520	3.371	1.00	51.02
	ATOM	3744	CG	GLN	491	69.286	12.518	2.289	1.00	56.00
	ATOM	3745	CD	GLN	491	70.155	13.143	1.202	1.00	58.93
	ATOM	3746	OE1	GLN	491	70.483	14.330	1.255	1.00	60.31
	ATOM	3747	NE2	GLN	491	70.529	12.341	0.202	1.00	60.19
	ATOM	3750	C	GLN	491	68.623	11.720	5.114	1.00	45.59
	ATOM	3751	O	GLN	491	69.511	11.792	5.959	1.00	45.22
	ATOM	3752	N	VAL	492	68.148	10.561	4.693	1.00	43.19
30	ATOM	3754	CA	VAL	492	68.676	9.304	5.193	1.00	41.54
	ATOM	3755	CB	VAL	492	67.655	8.584	6.087	1.00	41.74
	ATOM	3756	CG1	VAL	492	68.217	7.248	6.561	1.00	43.70
	ATOM	3757	CG2	VAL	492	67.283	9.463	7.269	1.00	44.07
	ATOM	3758	C	VAL	492	68.971	8.424	3.993	1.00	39.72
	ATOM	3759	O	VAL	492	68.125	8.271	3.108	1.00	39.81
	ATOM	3760	N	VAL	493	70.176	7.872	3.942	1.00	36.38
	ATOM	3762	CA	VAL	493	70.545	7.001	2.844	1.00	35.88
	ATOM	3763	CB	VAL	493	71.580	7.666	1.869	1.00	36.92
35	ATOM	3764	CG1	VAL	493	71.142	9.069	1.485	1.00	36.64
	ATOM	3765	CG2	VAL	493	72.978	7.670	2.469	1.00	38.29
	ATOM	3766	C	VAL	493	71.131	5.689	3.351	1.00	36.03
	ATOM	3767	O	VAL	493	71.693	5.617	4.443	1.00	36.57
	ATOM	3768	N	LEU	494	70.947	4.637	2.571	1.00	34.91

	ATOM	3770	CA	LEU	494	71.500	3.344	2.909	1.00	36.04
	ATOM	3771	CB	LEU	494	70.809	2.244	2.094	1.00	37.43
	ATOM	3772	CG	LEU	494	71.312	0.814	2.269	1.00	36.62
	ATOM	3773	CD1	LEU	494	71.327	0.437	3.735	1.00	36.37
	ATOM	3774	CD2	LEU	494	70.419	-0.118	1.479	1.00	40.70
	ATOM	3775	C	LEU	494	72.967	3.451	2.510	1.00	37.08
	ATOM	3776	O	LEU	494	73.308	4.160	1.560	1.00	34.90
5	ATOM	3777	N	ALA	495	73.839	2.779	3.243	1.00	37.18
	ATOM	3779	CA	ALA	495	75.246	2.830	2.918	1.00	39.84
	ATOM	3780	CB	ALA	495	75.885	4.066	3.541	1.00	39.29
	ATOM	3781	C	ALA	495	75.949	1.578	3.400	1.00	41.68
	ATOM	3782	O	ALA	495	75.400	0.808	4.189	1.00	41.53
	ATOM	3783	N	GLU	496	77.149	1.348	2.881	1.00	43.44
	ATOM	3785	CA	GLU	496	77.936	0.202	3.297	1.00	42.86
	ATOM	3786	CB	GLU	496	78.328	-0.663	2.101	1.00	44.63
	ATOM	3787	CG	GLU	496	77.120	-1.167	1.320	1.00	53.31
10	ATOM	3788	CD	GLU	496	77.286	-2.450	0.545	1.00	59.48
	ATOM	3789	OE1	GLU	496	76.494	-3.332	0.534	1.00	62.39
	ATOM	3790	OE2	GLU	496	78.477	-2.580	-0.053	1.00	62.15
	ATOM	3791	C	GLU	496	79.150	0.750	4.006	1.00	40.96
	ATOM	3792	O	GLU	496	79.889	1.568	3.455	1.00	40.81
	ATOM	3793	N	ALA	497	79.267	0.411	5.280	1.00	40.79
	ATOM	3795	CA	ALA	497	80.381	0.857	6.096	1.00	41.84
	ATOM	3796	CB	ALA	497	79.888	1.240	7.478	1.00	38.80
	ATOM	3797	C	ALA	497	81.394	-0.280	6.181	1.00	44.72
15	ATOM	3798	O	ALA	497	81.019	-1.445	6.215	1.00	44.78
	ATOM	3799	N	ILE	498	82.678	0.054	6.183	1.00	48.03
	ATOM	3801	CA	ILE	498	83.729	-0.952	6.255	1.00	48.78
	ATOM	3802	CB	ILE	498	84.654	-0.894	5.014	1.00	50.57
	ATOM	3803	CG2	ILE	498	85.748	-1.954	5.119	1.00	51.32
	ATOM	3804	CG1	ILE	498	83.851	-1.103	3.726	1.00	51.90
	ATOM	3805	CD1	ILE	498	83.139	0.146	3.198	1.00	55.47
	ATOM	3806	C	ILE	498	84.573	-0.754	7.511	1.00	48.31
	ATOM	3807	O	ILE	498	85.005	0.359	7.805	1.00	47.90
20	ATOM	3808	N	GLY	499	84.754	-1.829	8.271	1.00	49.29
	ATOM	3810	CA	GLY	499	85.563	-1.774	9.479	1.00	53.17
	ATOM	3811	C	GLY	499	85.076	-0.944	10.657	1.00	57.22
	ATOM	3812	O	GLY	499	85.885	-0.341	11.364	1.00	59.20
	ATOM	3813	N	LEU	500	83.768	-0.948	10.909	1.00	58.51
	ATOM	3815	CA	LEU	500	83.193	-0.189	12.023	1.00	57.80
	ATOM	3816	CB	LEU	500	81.705	-0.519	12.181	1.00	55.67
	ATOM	3817	CG	LEU	500	80.789	0.036	11.086	1.00	54.81
	ATOM	3818	CD1	LEU	500	79.361	-0.445	11.293	1.00	53.00
25	ATOM	3819	CD2	LEU	500	80.854	1.561	11.089	1.00	53.27
	ATOM	3820	C	LEU	500	83.926	-0.466	13.333	1.00	58.15
	ATOM	3821	O	LEU	500	84.461	-1.560	13.529	1.00	60.29
	ATOM	3822	N	PRO	505	87.397	-6.022	10.511	1.00	77.18
	ATOM	3823	CD	PRO	505	88.509	-6.651	11.242	1.00	78.26
	ATOM	3824	CA	PRO	505	87.755	-4.660	10.097	1.00	75.62
	ATOM	3825	CB	PRO	505	89.166	-4.487	10.669	1.00	75.77
	ATOM	3826	CG	PRO	505	89.696	-5.884	10.715	1.00	77.07
	ATOM	3827	C	PRO	505	87.709	-4.440	8.583	1.00	73.15
30	ATOM	3828	O	PRO	505	87.772	-3.308	8.105	1.00	72.63
	ATOM	3829	N	ASN	506	87.595	-5.524	7.830	1.00	71.27
	ATOM	3831	CA	ASN	506	87.518	-5.421	6.380	1.00	69.14
	ATOM	3832	CB	ASN	506	88.577	-6.313	5.728	1.00	70.76
	ATOM	3833	C	ASN	506	86.119	-5.840	5.940	1.00	67.30
	ATOM	3834	O	ASN	506	85.834	-5.957	4.750	1.00	67.03
	ATOM	3835	N	ARG	507	85.250	-6.064	6.921	1.00	65.27
	ATOM	3837	CA	ARG	507	83.876	-6.479	6.669	1.00	62.86
	ATOM	3838	CB	ARG	507	83.335	-7.267	7.864	1.00	65.45
35	ATOM	3839	C	ARG	507	82.991	-5.274	6.443	1.00	59.56
	ATOM	3840	O	ARG	507	83.161	-4.247	7.100	1.00	59.70
	ATOM	3841	N	VAL	508	82.057	-5.397	5.509	1.00	56.65
	ATOM	3843	CA	VAL	508	81.135	-4.310	5.226	1.00	55.48
	ATOM	3844	CB	VAL	508	80.850	-4.157	3.719	1.00	55.71

	ATOM	3845	CG1	VAL	508	82.146	-3.962	2.962	1.00	58.18
	ATOM	3846	CG2	VAL	508	80.096	-5.356	3.188	1.00	58.76
	ATOM	3847	C	VAL	508	79.833	-4.537	5.979	1.00	53.10
	ATOM	3848	O	VAL	508	79.352	-5.665	6.091	1.00	54.25
	ATOM	3849	N	THR	509	79.282	-3.460	6.514	1.00	50.06
	ATOM	3851	CA	THR	509	78.041	-3.512	7.260	1.00	45.70
	ATOM	3852	CB	THR	509	78.256	-3.029	8.715	1.00	45.59
5	ATOM	3853	OG1	THR	509	79.395	-3.696	9.279	1.00	43.86
	ATOM	3855	CG2	THR	509	77.028	-3.328	9.573	1.00	44.19
	ATOM	3856	C	THR	509	77.064	-2.574	6.564	1.00	43.57
	ATOM	3857	O	THR	509	77.416	-1.444	6.221	1.00	41.15
	ATOM	3858	N	LYS	510	75.871	-3.073	6.268	1.00	42.96
	ATOM	3860	CA	LYS	510	74.847	-2.253	5.640	1.00	41.91
	ATOM	3861	CB	LYS	510	73.740	-3.144	5.091	1.00	44.74
	ATOM	3862	CG	LYS	510	72.864	-2.461	4.069	1.00	51.83
	ATOM	3863	CD	LYS	510	73.392	-2.645	2.659	1.00	55.00
10	ATOM	3864	CE	LYS	510	72.769	-3.879	2.020	1.00	58.36
	ATOM	3865	NZ	LYS	510	73.069	-5.131	2.769	1.00	58.57
	ATOM	3869	C	LYS	510	74.322	-1.367	6.789	1.00	40.74
	ATOM	3870	O	LYS	510	73.909	-1.874	7.837	1.00	40.26
	ATOM	3871	N	VAL	511	74.413	-0.052	6.624	1.00	37.21
	ATOM	3873	CA	VAL	511	73.989	0.877	7.661	1.00	33.44
	ATOM	3874	CB	VAL	511	75.227	1.515	8.362	1.00	34.53
	ATOM	3875	CG1	VAL	511	76.100	0.436	9.014	1.00	31.98
	ATOM	3876	CG2	VAL	511	76.048	2.322	7.358	1.00	34.82
15	ATOM	3877	C	VAL	511	73.134	1.989	7.087	1.00	31.34
	ATOM	3878	O	VAL	511	73.025	2.130	5.871	1.00	31.33
	ATOM	3879	N	ALA	512	72.485	2.748	7.961	1.00	30.70
	ATOM	3881	CA	ALA	512	71.671	3.876	7.523	1.00	30.81
	ATOM	3882	CB	ALA	512	70.305	3.879	8.206	1.00	29.85
	ATOM	3883	C	ALA	512	72.453	5.124	7.904	1.00	31.30
	ATOM	3884	O	ALA	512	73.036	5.197	8.996	1.00	30.24
	ATOM	3885	N	VAL	513	72.480	6.096	6.999	1.00	30.86
	ATOM	3887	CA	VAL	513	73.208	7.332	7.238	1.00	30.58
20	ATOM	3888	CB	VAL	513	74.358	7.525	6.223	1.00	31.11
	ATOM	3889	CG1	VAL	513	75.132	8.788	6.547	1.00	29.63
	ATOM	3890	CG2	VAL	513	75.290	6.317	6.223	1.00	28.70
	ATOM	3891	C	VAL	513	72.300	8.556	7.189	1.00	31.28
	ATOM	3892	O	VAL	513	71.645	8.824	6.167	1.00	30.12
	ATOM	3893	N	LYS	514	72.229	9.257	8.321	1.00	31.03
	ATOM	3895	CA	LYS	514	71.439	10.479	8.451	1.00	32.56
	ATOM	3896	CB	LYS	514	70.881	10.635	9.870	1.00	34.31
	ATOM	3897	CG	LYS	514	69.977	9.516	10.326	1.00	38.25
25	ATOM	3898	CD	LYS	514	69.513	9.774	11.753	1.00	47.74
	ATOM	3899	CE	LYS	514	68.514	8.719	12.230	1.00	51.60
	ATOM	3900	NZ	LYS	514	67.226	8.755	11.468	1.00	58.53
	ATOM	3904	C	LYS	514	72.357	11.659	8.137	1.00	30.29
	ATOM	3905	O	LYS	514	73.485	11.736	8.628	1.00	28.14
	ATOM	3906	N	MET	515	71.867	12.580	7.320	1.00	30.67
	ATOM	3908	CA	MET	515	72.643	13.747	6.920	1.00	29.94
	ATOM	3909	CB	MET	515	73.435	13.442	5.648	1.00	30.64
	ATOM	3910	CG	MET	515	72.557	13.038	4.464	1.00	32.16
30	ATOM	3911	SD	MET	515	73.525	12.522	3.036	1.00	37.59
	ATOM	3912	CE	MET	515	74.015	10.933	3.563	1.00	29.11
	ATOM	3913	C	MET	515	71.675	14.869	6.635	1.00	29.71
	ATOM	3914	O	MET	515	70.462	14.664	6.598	1.00	30.04
	ATOM	3915	N	LEU	516	72.212	16.060	6.445	1.00	29.56
	ATOM	3917	CA	LEU	516	71.381	17.206	6.136	1.00	30.76
	ATOM	3918	CB	LEU	516	72.093	18.508	6.526	1.00	28.20
	ATOM	3919	CG	LEU	516	72.396	18.724	8.011	1.00	28.48
	ATOM	3920	CD1	LEU	516	73.202	19.983	8.185	1.00	27.55
35	ATOM	3921	CD2	LEU	516	71.114	18.814	8.794	1.00	25.49
	ATOM	3922	C	LEU	516	71.081	17.225	4.647	1.00	30.97
	ATOM	3923	O	LEU	516	71.728	16.534	3.851	1.00	29.93
	ATOM	3924	N	LYS	517	70.030	17.946	4.291	1.00	31.57
	ATOM	3926	CA	LYS	517	69.677	18.117	2.899	1.00	31.44

	ATOM	3927	CB	LYS	517	68.169	18.310	2.752	1.00	34.79
	ATOM	3928	CG	LYS	517	67.375	17.098	3.194	1.00	38.42
	ATOM	3929	CD	LYS	517	66.148	16.888	2.343	1.00	46.52
	ATOM	3930	CE	LYS	517	65.087	17.950	2.582	1.00	53.77
	ATOM	3931	NZ	LYS	517	63.901	17.740	1.690	1.00	56.38
	ATOM	3935	C	LYS	517	70.457	19.377	2.499	1.00	30.18
	ATOM	3936	O	LYS	517	70.892	20.134	3.370	1.00	27.47
5	ATOM	3937	N	SER	518	70.646	19.594	1.201	1.00	31.13
	ATOM	3939	CA	SER	518	71.394	20.747	0.693	1.00	32.11
	ATOM	3940	CB	SER	518	71.518	20.652	-0.824	1.00	33.45
	ATOM	3941	OG	SER	518	70.242	20.567	-1.428	1.00	34.51
	ATOM	3943	C	SER	518	70.814	22.103	1.073	1.00	32.81
	ATOM	3944	O	SER	518	71.515	23.123	1.027	1.00	34.03
	ATOM	3945	N	ASP	519	69.540	22.117	1.449	1.00	29.80
	ATOM	3947	CA	ASP	519	68.886	23.354	1.836	1.00	28.94
	ATOM	3948	CB	ASP	519	67.473	23.421	1.237	1.00	33.90
10	ATOM	3949	CG	ASP	519	66.542	22.332	1.771	1.00	34.42
	ATOM	3950	OD1	ASP	519	67.020	21.328	2.333	1.00	35.58
	ATOM	3951	OD2	ASP	519	65.313	22.485	1.617	1.00	41.83
	ATOM	3952	C	ASP	519	68.829	23.559	3.342	1.00	29.08
	ATOM	3953	O	ASP	519	68.177	24.485	3.816	1.00	29.79
	ATOM	3954	N	ALA	520	69.514	22.710	4.099	1.00	29.73
	ATOM	3956	CA	ALA	520	69.488	22.824	5.558	1.00	29.16
	ATOM	3957	CB	ALA	520	70.174	21.639	6.190	1.00	28.13
	ATOM	3958	C	ALA	520	70.122	24.108	6.040	1.00	28.06
15	ATOM	3959	O	ALA	520	70.880	24.741	5.309	1.00	28.84
	ATOM	3960	N	THR	521	69.800	24.491	7.272	1.00	27.84
	ATOM	3962	CA	THR	521	70.357	25.692	7.885	1.00	30.45
	ATOM	3963	CB	THR	521	69.254	26.635	8.463	1.00	33.56
	ATOM	3964	OG1	THR	521	68.547	25.968	9.520	1.00	36.27
	ATOM	3966	CG2	THR	521	68.275	27.074	7.379	1.00	36.06
	ATOM	3967	C	THR	521	71.251	25.263	9.048	1.00	30.04
	ATOM	3968	O	THR	521	71.348	24.072	9.369	1.00	28.16
	ATOM	3969	N	GLU	522	71.876	26.241	9.696	1.00	31.42
20	ATOM	3971	CA	GLU	522	72.745	25.978	10.832	1.00	36.94
	ATOM	3972	CB	GLU	522	73.404	27.282	11.299	1.00	44.74
	ATOM	3973	CG	GLU	522	74.414	27.130	12.450	1.00	58.34
	ATOM	3974	CD	GLU	522	75.769	26.579	12.009	1.00	64.50
	ATOM	3975	OE1	GLU	522	76.798	27.261	12.231	1.00	64.89
	ATOM	3976	OE2	GLU	522	75.806	25.461	11.452	1.00	70.26
	ATOM	3977	C	GLU	522	71.932	25.345	11.969	1.00	34.02
	ATOM	3978	O	GLU	522	72.428	24.480	12.684	1.00	31.11
	ATOM	3979	N	LYS	523	70.670	25.750	12.097	1.00	32.53
25	ATOM	3981	CA	LYS	523	69.805	25.210	13.135	1.00	34.06
	ATOM	3982	CB	LYS	523	68.481	25.970	13.188	1.00	39.54
	ATOM	3983	CG	LYS	523	67.560	25.541	14.322	1.00	45.55
	ATOM	3984	CD	LYS	523	66.360	24.776	13.789	1.00	52.08
	ATOM	3985	CE	LYS	523	65.443	24.312	14.914	1.00	54.16
	ATOM	3986	NZ	LYS	523	64.313	23.509	14.373	1.00	54.38
	ATOM	3990	C	LYS	523	69.572	23.733	12.861	1.00	31.73
	ATOM	3991	O	LYS	523	69.589	22.922	13.788	1.00	31.15
	ATOM	3992	N	ASP	524	69.374	23.383	11.590	1.00	29.22
30	ATOM	3994	CA	ASP	524	69.182	21.980	11.214	1.00	28.79
	ATOM	3995	CB	ASP	524	68.928	21.831	9.714	1.00	27.65
	ATOM	3996	CG	ASP	524	67.586	22.396	9.286	1.00	33.89
	ATOM	3997	OD1	ASP	524	66.568	22.106	9.954	1.00	34.66
	ATOM	3998	OD2	ASP	524	67.549	23.120	8.270	1.00	30.04
	ATOM	3999	C	ASP	524	70.424	21.190	11.606	1.00	28.00
	ATOM	4000	O	ASP	524	70.317	20.104	12.162	1.00	30.83
	ATOM	4001	N	LEU	525	71.603	21.761	11.347	1.00	29.87
	ATOM	4003	CA	LEU	525	72.873	21.121	11.700	1.00	27.60
35	ATOM	4004	CB	LEU	525	74.064	21.997	11.282	1.00	24.08
	ATOM	4005	CG	LEU	525	75.462	21.433	11.593	1.00	26.11
	ATOM	4006	CD1	LEU	525	75.597	19.979	11.098	1.00	23.67
	ATOM	4007	CD2	LEU	525	76.530	22.321	10.967	1.00	21.28
	ATOM	4008	C	LEU	525	72.909	20.869	13.200	1.00	26.38

	ATOM	4009	O	LEU	525	73.249	19.777	13.653	1.00	26.09
	ATOM	4010	N	SER	526	72.560	21.902	13.956	1.00	29.72
	ATOM	4012	CA	SER	526	72.500	21.861	15.422	1.00	32.16
	ATOM	4013	CB	SER	526	71.980	23.209	15.939	1.00	33.45
	ATOM	4014	OG	SER	526	71.793	23.213	17.343	1.00	40.42
	ATOM	4016	C	SER	526	71.572	20.728	15.902	1.00	31.64
	ATOM	4017	O	SER	526	71.869	20.030	16.889	1.00	32.54
5	ATOM	4018	N	ASP	527	70.454	20.561	15.201	1.00	27.92
	ATOM	4020	CA	ASP	527	69.492	19.527	15.524	1.00	28.60
	ATOM	4021	CB	ASP	527	68.187	19.767	14.765	1.00	29.35
	ATOM	4022	CG	ASP	527	67.418	20.984	15.278	1.00	31.37
	ATOM	4023	OD1	ASP	527	67.759	21.549	16.353	1.00	31.96
	ATOM	4024	OD2	ASP	527	66.456	21.369	14.591	1.00	32.58
	ATOM	4025	C	ASP	527	70.038	18.131	15.246	1.00	28.82
	ATOM	4026	O	ASP	527	69.854	17.212	16.047	1.00	29.65
	ATOM	4027	N	LEU	528	70.721	17.962	14.120	1.00	29.29
10	ATOM	4029	CA	LEU	528	71.302	16.658	13.794	1.00	29.94
	ATOM	4030	CB	LEU	528	71.780	16.621	12.336	1.00	26.45
	ATOM	4031	CG	LEU	528	72.315	15.276	11.840	1.00	28.34
	ATOM	4032	CD1	LEU	528	71.240	14.189	12.035	1.00	27.16
	ATOM	4033	CD2	LEU	528	72.756	15.387	10.372	1.00	25.91
	ATOM	4034	C	LEU	528	72.449	16.319	14.776	1.00	29.72
	ATOM	4035	O	LEU	528	72.617	15.162	15.178	1.00	28.98
	ATOM	4036	N	ILE	529	73.224	17.329	15.168	1.00	30.15
	ATOM	4038	CA	ILE	529	74.305	17.131	16.134	1.00	28.88
15	ATOM	4039	CB	ILE	529	75.188	18.382	16.268	1.00	26.91
	ATOM	4040	CG2	ILE	529	76.175	18.221	17.423	1.00	24.82
	ATOM	4041	CG1	ILE	529	75.960	18.613	14.984	1.00	23.98
	ATOM	4042	CD1	ILE	529	76.663	19.932	14.973	1.00	28.33
	ATOM	4043	C	ILE	529	73.709	16.799	17.518	1.00	29.71
	ATOM	4044	O	ILE	529	74.172	15.880	18.193	1.00	29.19
	ATOM	4045	N	SER	530	72.672	17.524	17.926	1.00	26.84
	ATOM	4047	CA	SER	530	72.061	17.247	19.214	1.00	31.46
	ATOM	4048	CB	SER	530	70.948	18.251	19.521	1.00	36.17
20	ATOM	4049	OG	SER	530	70.045	18.363	18.431	1.00	47.58
	ATOM	4051	C	SER	530	71.526	15.822	19.248	1.00	30.05
	ATOM	4052	O	SER	530	71.646	15.136	20.270	1.00	29.61
	ATOM	4053	N	GLU	531	70.972	15.357	18.132	1.00	27.74
	ATOM	4055	CA	GLU	531	70.458	13.999	18.090	1.00	28.71
	ATOM	4056	CB	GLU	531	69.709	13.727	16.789	1.00	29.72
	ATOM	4057	CG	GLU	531	69.147	12.319	16.737	1.00	32.21
	ATOM	4058	CD	GLU	531	68.510	11.979	15.414	1.00	33.88
25	ATOM	4059	OE1	GLU	531	68.026	10.846	15.281	1.00	37.60
	ATOM	4060	OE2	GLU	531	68.483	12.833	14.510	1.00	34.70
	ATOM	4061	C	GLU	531	71.578	12.974	18.271	1.00	28.91
	ATOM	4062	O	GLU	531	71.428	12.007	19.019	1.00	29.46
	ATOM	4063	N	MET	532	72.686	13.179	17.567	1.00	28.84
	ATOM	4065	CA	MET	532	73.851	12.296	17.648	1.00	29.35
	ATOM	4066	CB	MET	532	74.948	12.786	16.689	1.00	27.41
	ATOM	4067	CG	MET	532	76.299	12.117	16.872	1.00	26.71
	ATOM	4068	SD	MET	532	77.503	12.675	15.640	1.00	32.27
	ATOM	4069	CE	MET	532	77.732	14.400	16.117	1.00	24.10
30	ATOM	4070	C	MET	532	74.389	12.280	19.078	1.00	28.80
	ATOM	4071	O	MET	532	74.700	11.230	19.630	1.00	29.74
	ATOM	4072	N	GLU	533	74.481	13.454	19.681	1.00	28.83
	ATOM	4074	CA	GLU	533	74.985	13.546	21.033	1.00	29.66
	ATOM	4075	CB	GLU	533	75.182	15.008	21.423	1.00	32.23
	ATOM	4076	CG	GLU	533	76.331	15.687	20.651	1.00	34.47
	ATOM	4077	CD	GLU	533	77.656	14.937	20.774	1.00	38.03
	ATOM	4078	OE1	GLU	533	78.168	14.780	21.903	1.00	39.75
	ATOM	4079	OE2	GLU	533	78.192	14.497	19.736	1.00	38.75
35	ATOM	4080	C	GLU	533	74.058	12.815	22.005	1.00	31.55
	ATOM	4081	O	GLU	533	74.521	12.083	22.889	1.00	30.63
	ATOM	4082	N	MET	534	72.750	12.958	21.799	1.00	31.31
	ATOM	4084	CA	MET	534	71.789	12.289	22.664	1.00	30.78
	ATOM	4085	CB	MET	534	70.348	12.672	22.319	1.00	31.23

	ATOM	4086	CG	MET	534	69.453	12.648	23.551	0.50	29.35	PRT1
	ATOM	4087	SD	MET	534	67.688	12.563	23.246	0.50	28.79	PRT1
	ATOM	4088	CE	MET	534	67.290	14.230	22.875	0.50	26.96	PRT1
	ATOM	4089	C	MET	534	71.991	10.773	22.560	1.00	28.82	
	ATOM	4090	O	MET	534	72.053	10.083	23.568	1.00	30.10	
	ATOM	4091	N	MET	535	72.149	10.271	21.339	1.00	29.16	
	ATOM	4093	CA	MET	535	72.381	8.852	21.110	1.00	29.37	
5	ATOM	4094	CB	MET	535	72.546	8.551	19.617	1.00	27.35	
	ATOM	4095	CG	MET	535	71.281	8.790	18.817	1.00	28.40	
	ATOM	4096	SD	MET	535	71.255	7.955	17.255	1.00	30.26	
	ATOM	4097	CE	MET	535	71.336	9.279	16.188	1.00	35.50	
	ATOM	4098	C	MET	535	73.612	8.388	21.887	1.00	30.36	
	ATOM	4099	O	MET	535	73.626	7.287	22.460	1.00	26.13	
	ATOM	4100	N	LYS	536	74.640	9.233	21.909	1.00	30.70	
	ATOM	4102	CA	LYS	536	75.850	8.913	22.649	1.00	31.76	
	ATOM	4103	CB	LYS	536	76.934	9.954	22.388	1.00	31.05	
10	ATOM	4104	CG	LYS	536	77.550	9.883	21.004	1.00	26.80	
	ATOM	4105	CD	LYS	536	78.534	11.017	20.860	1.00	31.05	
	ATOM	4106	CE	LYS	536	79.132	11.138	19.466	1.00	29.83	
	ATOM	4107	NZ	LYS	536	79.957	12.377	19.440	1.00	29.32	
	ATOM	4111	C	LYS	536	75.550	8.834	24.150	1.00	31.99	
	ATOM	4112	O	LYS	536	75.920	7.859	24.806	1.00	31.92	
	ATOM	4113	N	MET	537	74.837	9.826	24.676	1.00	31.81	
	ATOM	4115	CA	MET	537	74.517	9.835	26.090	1.00	35.37	
	ATOM	4116	CB	MET	537	73.860	11.154	26.506	1.00	41.32	
15	ATOM	4117	CG	MET	537	74.828	12.335	26.610	1.00	51.50	
	ATOM	4118	SD	MET	537	76.234	12.090	27.776	1.00	57.48	
	ATOM	4119	CE	MET	537	75.460	12.637	29.334	1.00	56.91	
	ATOM	4120	C	MET	537	73.630	8.679	26.499	1.00	36.11	
	ATOM	4121	O	MET	537	73.845	8.084	27.548	1.00	38.54	
	ATOM	4122	N	ILE	538	72.652	8.347	25.661	1.00	33.69	
	ATOM	4124	CA	ILE	538	71.704	7.277	25.954	1.00	31.62	
	ATOM	4125	CB	ILE	538	70.492	7.314	24.974	1.00	28.21	
	ATOM	4126	CG2	ILE	538	69.681	6.013	25.034	1.00	28.22	
20	ATOM	4127	CG1	ILE	538	69.590	8.488	25.338	1.00	23.74	
	ATOM	4128	CD1	ILE	538	68.487	8.728	24.344	1.00	27.94	
	ATOM	4129	C	ILE	538	72.322	5.894	26.008	1.00	31.07	
	ATOM	4130	O	ILE	538	71.952	5.080	26.860	1.00	33.13	
	ATOM	4131	N	GLY	539	73.239	5.611	25.094	1.00	29.52	
	ATOM	4133	CA	GLY	539	73.871	4.309	25.093	1.00	28.40	
	ATOM	4134	C	GLY	539	73.111	3.275	24.289	1.00	30.21	
	ATOM	4135	O	GLY	539	72.018	3.554	23.788	1.00	29.66	
	ATOM	4136	N	LYS	540	73.679	2.074	24.199	1.00	28.44	
25	ATOM	4138	CA	LYS	540	73.105	0.984	23.426	1.00	31.09	
	ATOM	4139	CB	LYS	540	74.215	0.089	22.895	1.00	33.15	
	ATOM	4140	CG	LYS	540	75.116	0.776	21.906	1.00	39.54	
	ATOM	4141	CD	LYS	540	76.125	-0.175	21.329	1.00	43.98	
	ATOM	4142	CE	LYS	540	77.033	0.562	20.349	1.00	50.79	
	ATOM	4143	NZ	LYS	540	76.338	0.977	19.086	1.00	51.09	
	ATOM	4147	C	LYS	540	72.053	0.087	24.059	1.00	32.78	
	ATOM	4148	O	LYS	540	72.088	-0.195	25.266	1.00	32.41	
	ATOM	4149	N	HIS	541	71.137	-0.374	23.208	1.00	31.20	
30	ATOM	4151	CA	HIS	541	70.080	-1.304	23.591	1.00	31.53	
	ATOM	4152	CB	HIS	541	68.911	-0.630	24.298	1.00	30.69	
	ATOM	4153	CG	HIS	541	67.948	-1.613	24.882	1.00	31.18	
	ATOM	4154	CD2	HIS	541	67.938	-2.255	26.072	1.00	33.02	
	ATOM	4155	ND1	HIS	541	66.882	-2.123	24.165	1.00	30.56	
	ATOM	4157	CE1	HIS	541	66.268	-3.037	24.889	1.00	32.95	
	ATOM	4158	NE2	HIS	541	66.886	-3.140	26.053	1.00	31.79	
	ATOM	4160	C	HIS	541	69.590	-2.013	22.340	1.00	32.72	
	ATOM	4161	O	HIS	541	69.495	-1.404	21.275	1.00	30.34	
35	ATOM	4162	N	LYS	542	69.282	-3.305	22.475	1.00	32.32	
	ATOM	4164	CA	LYS	542	68.828	-4.131	21.359	1.00	30.29	
	ATOM	4165	CB	LYS	542	68.637	-5.587	21.798	1.00	29.34	
	ATOM	4166	C	LYS	542	67.560	-3.661	20.692	1.00	29.09	
	ATOM	4167	O	LYS	542	67.369	-3.903	19.507	1.00	29.12	

	ATOM	4168	N	ASN	543	66.683	-3.012	21.446	1.00	28.54
	ATOM	4170	CA	ASN	543	65.425	-2.559	20.869	1.00	29.10
	ATOM	4171	CB	ASN	543	64.245	-3.047	21.712	1.00	29.69
	ATOM	4172	CG	ASN	543	64.253	-4.556	21.900	1.00	29.62
	ATOM	4173	OD1	ASN	543	64.510	-5.050	23.000	1.00	31.63
	ATOM	4174	ND2	ASN	543	64.020	-5.291	20.828	1.00	28.66
	ATOM	4177	C	ASN	543	65.299	-1.073	20.532	1.00	29.61
5	ATOM	4178	O	ASN	543	64.207	-0.507	20.578	1.00	28.00
	ATOM	4179	N	ILE	544	66.432	-0.442	20.222	1.00	28.39
	ATOM	4181	CA	ILE	544	66.466	0.958	19.804	1.00	25.73
	ATOM	4182	CB	ILE	544	66.903	1.952	20.935	1.00	25.98
	ATOM	4183	CG2	ILE	544	66.083	1.721	22.215	1.00	22.04
	ATOM	4184	CG1	ILE	544	68.412	1.860	21.209	1.00	24.30
	ATOM	4185	CD1	ILE	544	68.901	2.846	22.274	1.00	22.83
	ATOM	4186	C	ILE	544	67.463	1.020	18.639	1.00	26.20
	ATOM	4187	O	ILE	544	68.276	0.106	18.467	1.00	25.46
10	ATOM	4188	N	ILE	545	67.307	2.016	17.771	1.00	26.26
	ATOM	4190	CA	ILE	545	68.223	2.209	16.641	1.00	27.62
	ATOM	4191	CB	ILE	545	67.647	3.195	15.585	1.00	28.33
	ATOM	4192	CG2	ILE	545	68.726	3.595	14.562	1.00	28.00
	ATOM	4193	CG1	ILE	545	66.453	2.565	14.856	1.00	24.69
	ATOM	4194	CD1	ILE	545	66.850	1.467	13.875	1.00	26.17
	ATOM	4195	C	ILE	545	69.492	2.794	17.267	1.00	28.23
	ATOM	4196	O	ILE	545	69.468	3.872	17.846	1.00	28.97
	ATOM	4197	N	ASN	546	70.595	2.069	17.164	1.00	29.45
15	ATOM	4199	CA	ASN	546	71.845	2.508	17.774	1.00	28.58
	ATOM	4200	CB	ASN	546	72.580	1.309	18.384	1.00	26.34
	ATOM	4201	CG	ASN	546	71.812	0.673	19.527	1.00	25.52
	ATOM	4202	OD1	ASN	546	71.634	1.277	20.580	1.00	28.82
	ATOM	4203	ND2	ASN	546	71.341	-0.542	19.318	1.00	26.57
	ATOM	4206	C	ASN	546	72.810	3.264	16.881	1.00	28.74
	ATOM	4207	O	ASN	546	72.858	3.041	15.675	1.00	29.26
	ATOM	4208	N	LEU	547	73.578	4.155	17.504	1.00	29.90
	ATOM	4210	CA	LEU	547	74.618	4.936	16.834	1.00	30.27
20	ATOM	4211	CB	LEU	547	75.075	6.081	17.745	1.00	25.85
	ATOM	4212	CG	LEU	547	76.161	7.034	17.232	1.00	27.73
	ATOM	4213	CD1	LEU	547	75.670	7.851	16.033	1.00	27.38
	ATOM	4214	CD2	LEU	547	76.545	7.966	18.345	1.00	29.14
	ATOM	4215	C	LEU	547	75.811	4.004	16.567	1.00	32.22
	ATOM	4216	O	LEU	547	76.256	3.291	17.471	1.00	33.38
	ATOM	4217	N	LEU	548	76.317	4.005	15.335	1.00	32.12
	ATOM	4219	CA	LEU	548	77.452	3.159	14.960	1.00	32.94
	ATOM	4220	CB	LEU	548	77.103	2.310	13.740	1.00	29.97
25	ATOM	4221	CG	LEU	548	75.839	1.458	13.840	1.00	31.55
	ATOM	4222	CD1	LEU	548	75.662	0.713	12.540	1.00	27.85
	ATOM	4223	CD2	LEU	548	75.917	0.500	15.025	1.00	26.34
	ATOM	4224	C	LEU	548	78.726	3.955	14.654	1.00	36.06
	ATOM	4225	O	LEU	548	79.836	3.410	14.668	1.00	36.42
	ATOM	4226	N	GLY	549	78.562	5.219	14.298	1.00	35.78
	ATOM	4228	CA	GLY	549	79.713	6.042	13.987	1.00	36.22
	ATOM	4229	C	GLY	549	79.267	7.376	13.433	1.00	35.30
	ATOM	4230	O	GLY	549	78.062	7.646	13.362	1.00	33.46
30	ATOM	4231	N	ALA	550	80.232	8.206	13.042	1.00	34.94
	ATOM	4233	CA	ALA	550	79.945	9.525	12.490	1.00	31.91
	ATOM	4234	CB	ALA	550	79.588	10.495	13.613	1.00	30.54
	ATOM	4235	C	ALA	550	81.128	10.077	11.715	1.00	31.58
	ATOM	4236	O	ALA	550	82.281	9.832	12.080	1.00	31.23
	ATOM	4237	N	CYS	551	80.818	10.812	10.643	1.00	31.13
	ATOM	4239	CA	CYS	551	81.805	11.503	9.804	1.00	28.28
	ATOM	4240	CB	CYS	551	81.621	11.180	8.316	1.00	27.27
	ATOM	4241	SG	CYS	551	81.771	9.449	7.839	1.00	30.33
35	ATOM	4242	C	CYS	551	81.450	12.960	10.074	1.00	25.88
	ATOM	4243	O	CYS	551	80.432	13.458	9.605	1.00	27.73
	ATOM	4244	N	THR	552	82.214	13.586	10.954	1.00	25.35
	ATOM	4246	CA	THR	552	81.988	14.967	11.353	1.00	26.79
	ATOM	4247	CB	THR	552	82.051	15.092	12.899	1.00	27.76

	ATOM	4248	OG1	THR	552	83.392	14.839	13.338	1.00	27.62
	ATOM	4250	CG2	THR	552	81.119	14.086	13.575	1.00	29.17
	ATOM	4251	C	THR	552	83.036	15.931	10.790	1.00	25.03
	ATOM	4252	O	THR	552	82.825	17.137	10.746	1.00	25.34
	ATOM	4253	N	GLN	553	84.174	15.385	10.381	1.00	27.34
	ATOM	4255	CA	GLN	553	85.285	16.190	9.888	1.00	26.31
5	ATOM	4256	CB	GLN	553	86.601	15.639	10.468	1.00	25.05
	ATOM	4257	CG	GLN	553	86.581	15.491	11.993	1.00	24.78
	ATOM	4258	CD	GLN	553	86.382	16.823	12.709	1.00	25.40
	ATOM	4259	OE1	GLN	553	87.175	17.748	12.546	1.00	33.74
	ATOM	4260	NE2	GLN	553	85.338	16.920	13.516	1.00	25.61
	ATOM	4263	C	GLN	553	85.390	16.274	8.379	1.00	27.08
	ATOM	4264	O	GLN	553	85.083	15.318	7.669	1.00	28.76
	ATOM	4265	N	ASP	554	85.804	17.438	7.879	1.00	28.63
	ATOM	4267	CA	ASP	554	86.015	17.677	6.471	1.00	29.70
	ATOM	4268	CB	ASP	554	87.335	17.050	6.051	1.00	29.73
10	ATOM	4269	CG	ASP	554	88.480	17.587	6.857	1.00	33.38
	ATOM	4270	OD1	ASP	554	88.794	18.780	6.711	1.00	36.53
	ATOM	4271	OD2	ASP	554	89.024	16.841	7.687	1.00	36.40
	ATOM	4272	C	ASP	554	84.908	17.258	5.522	1.00	29.64
	ATOM	4273	O	ASP	554	85.112	16.422	4.643	1.00	32.06
	ATOM	4274	N	GLY	555	83.748	17.881	5.679	1.00	28.59
	ATOM	4276	CA	GLY	555	92.620	17.579	4.825	1.00	26.65
	ATOM	4277	C	GLY	555	81.333	17.434	5.607	1.00	25.30
	ATOM	4278	O	GLY	555	81.319	17.593	6.834	1.00	23.96
15	ATOM	4279	N	PRO	556	80.229	17.113	4.920	1.00	24.84
	ATOM	4280	CD	PRO	556	80.159	16.850	3.472	1.00	21.36
	ATOM	4281	CA	PRO	556	78.920	16.942	5.550	1.00	25.26
	ATOM	4282	CB	PRO	556	78.033	16.494	4.386	1.00	23.37
	ATOM	4283	CG	PRO	556	79.025	15.881	3.398	1.00	24.44
	ATOM	4284	C	PRO	556	78.885	15.941	6.700	1.00	26.50
	ATOM	4285	O	PRO	556	79.515	14.875	6.654	1.00	27.38
	ATOM	4286	N	LEU	557	78.171	16.314	7.754	1.00	26.25
	ATOM	4288	CA	LEU	557	78.032	15.452	8.917	1.00	28.25
20	ATOM	4289	CB	LEU	557	77.403	16.217	10.092	1.00	27.09
	ATOM	4290	CG	LEU	557	76.922	15.414	11.310	1.00	28.35
	ATOM	4291	CD1	LEU	557	78.088	14.733	12.011	1.00	25.54
	ATOM	4292	CD2	LEU	557	76.204	16.340	12.271	1.00	26.91
	ATOM	4293	C	LEU	557	77.169	14.246	8.554	1.00	29.06
	ATOM	4294	O	LEU	557	76.060	14.385	8.011	1.00	29.05
	ATOM	4295	N	TYR	558	77.717	13.065	8.807	1.00	29.43
	ATOM	4297	CA	TYR	558	77.018	11.823	8.573	1.00	28.02
	ATOM	4298	CB	TYR	558	77.813	10.918	7.632	1.00	27.83
25	ATOM	4299	CG	TYR	558	77.969	11.414	6.203	1.00	31.70
	ATOM	4300	CD1	TYR	558	78.966	10.893	5.383	1.00	32.90
	ATOM	4301	CE1	TYR	558	79.121	11.315	4.073	1.00	32.69
	ATOM	4302	CD2	TYR	558	77.122	12.386	5.666	1.00	30.23
	ATOM	4303	CE2	TYR	558	77.271	12.815	4.350	1.00	29.97
	ATOM	4304	CZ	TYR	558	78.280	12.272	3.560	1.00	33.20
	ATOM	4305	OH	TYR	558	78.452	12.681	2.253	1.00	35.32
	ATOM	4307	C	TYR	558	76.848	11.131	9.932	1.00	28.42
	ATOM	4308	O	TYR	558	77.823	10.902	10.647	1.00	27.81
30	ATOM	4309	N	VAL	559	75.601	10.870	10.313	1.00	29.20
	ATOM	4311	CA	VAL	559	75.286	10.175	11.564	1.00	29.17
	ATOM	4312	CB	VAL	559	74.102	10.832	12.329	1.00	28.53
	ATOM	4313	CG1	VAL	559	73.802	10.036	13.607	1.00	27.08
	ATOM	4314	CG2	VAL	559	74.456	12.281	12.687	1.00	23.27
	ATOM	4315	C	VAL	559	74.911	8.772	11.137	1.00	26.41
	ATOM	4316	O	VAL	559	73.834	8.536	10.593	1.00	25.91
	ATOM	4317	N	ILE	560	75.824	7.846	11.371	1.00	26.71
	ATOM	4319	CA	ILE	560	75.638	6.465	10.966	1.00	27.55
35	ATOM	4320	CB	ILE	560	77.012	5.829	10.619	1.00	28.48
	ATOM	4321	CG2	ILE	560	76.819	4.468	9.979	1.00	29.18
	ATOM	4322	CG1	ILE	560	77.793	6.745	9.657	1.00	27.99
	ATOM	4323	CD1	ILE	560	79.274	6.399	9.525	1.00	28.97
	ATOM	4324	C	ILE	560	74.917	5.644	12.034	1.00	29.17

	ATOM	4325	O	ILE	560	75.404	5.497	13.160	1.00	28.92
	ATOM	4326	N	VAL	561	73.743	5.129	11.681	1.00	28.60
	ATOM	4328	CA	VAL	561	72.957	4.325	12.606	1.00	28.58
	ATOM	4329	CB	VAL	561	71.634	5.061	13.047	1.00	27.53
	ATOM	4330	CG1	VAL	561	71.951	6.400	13.701	1.00	22.44
	ATOM	4331	CG2	VAL	561	70.697	5.246	11.874	1.00	23.19
	ATOM	4332	C	VAL	561	72.618	2.956	12.006	1.00	28.20
5	ATOM	4333	O	VAL	561	72.875	2.694	10.825	1.00	27.99
	ATOM	4334	N	GLU	562	72.057	2.079	12.834	1.00	29.17
	ATOM	4336	CA	GLU	562	71.666	0.744	12.399	1.00	28.96
	ATOM	4337	CB	GLU	562	71.199	-0.086	13.589	1.00	27.34
	ATOM	4338	CG	GLU	562	72.308	-0.331	14.583	1.00	30.12
	ATOM	4339	CD	GLU	562	71.838	-1.075	15.808	1.00	32.29
	ATOM	4340	OE1	GLU	562	72.526	-2.030	16.217	1.00	32.45
	ATOM	4341	OE2	GLU	562	70.785	-0.702	16.362	1.00	30.16
	ATOM	4342	C	GLU	562	70.580	0.794	11.340	1.00	29.79
10	ATOM	4343	O	GLU	562	69.690	1.653	11.386	1.00	29.75
	ATOM	4344	N	TYR	563	70.684	-0.106	10.369	1.00	30.51
	ATOM	4346	CA	TYR	563	69.735	-0.209	9.267	1.00	33.76
	ATOM	4347	CB	TYR	563	70.494	-0.602	7.988	1.00	31.04
	ATOM	4348	CG	TYR	563	69.624	-0.928	6.806	1.00	33.40
	ATOM	4349	CD1	TYR	563	68.693	-0.019	6.340	1.00	33.07
	ATOM	4350	CE1	TYR	563	67.908	-0.301	5.240	1.00	34.71
	ATOM	4351	CD2	TYR	563	69.749	-2.141	6.147	1.00	34.61
	ATOM	4352	CE2	TYR	563	68.970	-2.446	5.035	1.00	36.54
15	ATOM	4353	CZ	TYR	563	68.047	-1.518	4.589	1.00	36.83
	ATOM	4354	OH	TYR	563	67.261	-1.805	3.501	1.00	38.81
	ATOM	4356	C	TYR	563	68.655	-1.269	9.588	1.00	36.14
	ATOM	4357	O	TYR	563	68.946	-2.365	10.023	1.00	37.70
	ATOM	4358	N	ALA	564	67.406	-0.948	9.309	1.00	37.87
	ATOM	4360	CA	ALA	564	66.276	-1.832	9.534	1.00	38.49
	ATOM	4361	CB	ALA	564	65.278	-1.167	10.458	1.00	42.57
	ATOM	4362	C	ALA	564	65.645	-2.153	8.179	1.00	39.65
	ATOM	4363	O	ALA	564	64.796	-1.423	7.687	1.00	39.74
20	ATOM	4364	N	SER	565	66.039	-3.280	7.607	1.00	40.06
	ATOM	4366	CA	SER	565	65.567	-3.699	6.295	1.00	40.67
	ATOM	4367	CB	SER	565	66.267	-4.986	5.883	1.00	38.71
	ATOM	4368	OG	SER	565	66.107	-5.964	6.889	1.00	41.35
	ATOM	4370	C	SER	565	64.081	-3.884	6.106	1.00	42.17
	ATOM	4371	O	SER	565	63.585	-3.741	4.992	1.00	44.25
	ATOM	4372	N	LYS	566	63.360	-4.207	7.167	1.00	41.71
	ATOM	4374	CA	LYS	566	61.928	-4.427	7.015	1.00	40.22
	ATOM	4375	CB	LYS	566	61.525	-5.668	7.800	1.00	39.51
25	ATOM	4376	CG	LYS	566	62.202	-6.910	7.226	1.00	41.48
	ATOM	4377	CD	LYS	566	62.113	-8.094	8.149	1.00	41.53
	ATOM	4378	CE	LYS	566	62.710	-9.312	7.491	1.00	41.18
	ATOM	4379	NZ	LYS	566	62.763	-10.458	8.438	1.00	46.17
	ATOM	4383	C	LYS	566	61.007	-3.220	7.263	1.00	40.47
	ATOM	4384	O	LYS	566	59.800	-3.367	7.486	1.00	42.68
	ATOM	4385	N	GLY	567	61.584	-2.026	7.167	1.00	38.90
	ATOM	4387	CA	GLY	567	60.826	-0.799	7.336	1.00	37.13
	ATOM	4388	C	GLY	567	60.199	-0.592	8.694	1.00	36.72
30	ATOM	4389	O	GLY	567	60.644	-1.172	9.683	1.00	38.48
	ATOM	4390	N	ASN	568	59.191	0.273	8.753	1.00	35.77
	ATOM	4392	CA	ASN	568	58.518	0.549	10.015	1.00	35.36
	ATOM	4393	CB	ASN	568	57.883	1.957	10.045	1.00	36.30
	ATOM	4394	CG	ASN	568	56.635	2.088	9.169	1.00	38.06
	ATOM	4395	OD1	ASN	568	55.623	1.421	9.383	1.00	38.66
	ATOM	4396	ND2	ASN	568	56.686	3.010	8.221	1.00	37.29
	ATOM	4399	C	ASN	568	57.504	-0.532	10.341	1.00	33.04
	ATOM	4400	O	ASN	568	57.061	-1.265	9.461	1.00	32.10
35	ATOM	4401	N	LEU	569	57.142	-0.612	11.617	1.00	33.59
	ATOM	4403	CA	LEU	569	56.199	-1.604	12.132	1.00	32.91
	ATOM	4404	CB	LEU	569	56.045	-1.428	13.647	1.00	33.84
	ATOM	4405	CG	LEU	569	55.088	-2.343	14.403	1.00	31.96
	ATOM	4406	CD1	LEU	569	55.522	-3.797	14.216	1.00	33.20

	ATOM	4407	CD2	LEU	569	55.089	-1.967	15.868	1.00	30.81
	ATOM	4408	C	LEU	569	54.820	-1.591	11.478	1.00	32.12
	ATOM	4409	O	LEU	569	54.214	-2.645	11.300	1.00	33.08
	ATOM	4410	N	ARG	570	54.315	-0.409	11.148	1.00	32.05
	ATOM	4412	CA	ARG	570	52.999	-0.293	10.529	1.00	35.21
	ATOM	4413	CB	ARG	570	52.659	1.173	10.256	1.00	36.77
	ATOM	4414	CG	ARG	570	51.282	1.370	9.653	1.00	43.11
5	ATOM	4415	CD	ARG	570	51.203	2.690	8.926	1.00	49.24
	ATOM	4416	NE	ARG	570	52.154	2.775	7.815	1.00	55.77
	ATOM	4418	CZ	ARG	570	52.995	3.790	7.619	1.00	58.89
	ATOM	4419	NH1	ARG	570	53.016	4.820	8.463	1.00	61.61
	ATOM	4422	NH2	ARG	570	53.804	3.786	6.566	1.00	59.16
	ATOM	4425	C	ARG	570	52.992	-1.063	9.220	1.00	35.16
	ATOM	4426	O	ARG	570	52.145	-1.922	8.990	1.00	35.50
	ATOM	4427	N	GLU	571	53.971	-0.760	8.383	1.00	36.29
	ATOM	4429	CA	GLU	571	54.111	-1.400	7.089	1.00	37.51
10	ATOM	4430	CB	GLU	571	55.219	-0.701	6.308	1.00	41.27
	ATOM	4431	CG	GLU	571	54.945	0.778	6.110	1.00	49.88
	ATOM	4432	CD	GLU	571	56.087	1.516	5.436	1.00	57.58
	ATOM	4433	OE1	GLU	571	57.264	1.122	5.636	1.00	60.59
	ATOM	4434	OE2	GLU	571	55.804	2.504	4.714	1.00	61.14
	ATOM	4435	C	GLU	571	54.399	-2.896	7.228	1.00	36.24
	ATOM	4436	O	GLU	571	53.889	-3.716	6.459	1.00	34.22
	ATOM	4437	N	TYR	572	55.202	-3.238	8.232	1.00	35.98
	ATOM	4439	CA	TYR	572	55.570	-4.619	8.517	1.00	35.34
15	ATOM	4440	CB	TYR	572	56.526	-4.656	9.714	1.00	30.94
	ATOM	4441	CG	TYR	572	56.959	-6.034	10.180	1.00	32.71
	ATOM	4442	CD1	TYR	572	58.009	-6.714	9.547	1.00	32.33
	ATOM	4443	CE1	TYR	572	58.464	-7.940	10.026	1.00	30.31
	ATOM	4444	CD2	TYR	572	56.369	-6.626	11.303	1.00	33.43
	ATOM	4445	CE2	TYR	572	56.813	-7.951	11.791	1.00	31.46
	ATOM	4446	CZ	TYR	572	57.864	-8.502	11.148	1.00	33.99
	ATOM	4447	OH	TYR	572	58.311	-9.706	11.640	1.00	36.30
	ATOM	4449	C	TYR	572	54.312	-5.425	8.826	1.00	37.26
20	ATOM	4450	O	TYR	572	54.121	-6.530	8.314	1.00	36.91
	ATOM	4451	N	LEU	573	53.457	-4.850	9.665	1.00	36.82
	ATOM	4453	CA	LEU	573	52.208	-5.476	10.075	1.00	35.56
	ATOM	4454	CB	LEU	573	51.537	-4.629	11.165	1.00	34.03
	ATOM	4455	CG	LEU	573	52.238	-4.527	12.519	1.00	32.82
	ATOM	4456	CD1	LEU	573	51.621	-3.423	13.377	1.00	28.95
	ATOM	4457	CD2	LEU	573	52.168	-5.856	13.207	1.00	29.46
	ATOM	4458	C	LEU	573	51.237	-5.658	8.915	1.00	34.56
	ATOM	4459	O	LEU	573	50.670	-6.729	8.726	1.00	34.80
25	ATOM	4460	N	GLN	574	51.030	-4.602	8.150	1.00	37.10
	ATOM	4462	CA	GLN	574	50.101	-4.666	7.031	1.00	41.15
	ATOM	4463	CB	GLN	574	49.875	-3.278	6.457	1.00	41.63
	ATOM	4464	CG	GLN	574	49.089	-2.375	7.366	1.00	43.13
	ATOM	4465	CD	GLN	574	49.063	-0.959	6.860	1.00	47.77
	ATOM	4466	OE1	GLN	574	49.655	-0.647	5.827	1.00	50.00
	ATOM	4467	NE2	GLN	574	48.378	-0.086	7.582	1.00	49.67
	ATOM	4470	C	GLN	574	50.529	-5.627	5.934	1.00	42.38
	ATOM	4471	O	GLN	574	49.685	-6.284	5.318	1.00	44.56
30	ATOM	4472	N	ALA	575	51.835	-5.717	5.697	1.00	41.99
	ATOM	4474	CA	ALA	575	52.367	-6.608	4.676	1.00	41.29
	ATOM	4475	CB	ALA	575	53.841	-6.325	4.446	1.00	40.43
	ATOM	4476	C	ALA	575	52.186	-8.058	5.066	1.00	41.42
	ATOM	4477	O	ALA	575	52.392	-8.949	4.249	1.00	43.65
	ATOM	4478	N	ARG	576	51.815	-8.294	6.319	1.00	42.56
	ATOM	4480	CA	ARG	576	51.642	-9.646	6.824	1.00	42.51
	ATOM	4481	CB	ARG	576	52.676	-9.910	7.920	1.00	40.14
	ATOM	4482	CG	ARG	576	54.100	-9.896	7.377	1.00	40.32
35	ATOM	4483	CD	ARG	576	55.172	-9.836	8.460	1.00	40.78
	ATOM	4484	NE	ARG	576	56.513	-9.783	7.874	1.00	42.13
	ATOM	4486	CZ	ARG	576	56.975	-8.785	7.120	1.00	40.73
	ATOM	4487	NH1	ARG	576	56.215	-7.732	6.851	1.00	39.21
	ATOM	4490	NH2	ARG	576	58.201	-8.846	6.622	1.00	37.62

	ATOM	4493	C	ARG	576	50.242	-9.931	7.326	1.00	44.48
	ATOM	4494	O	ARG	576	50.028	-10.869	8.098	1.00	46.84
	ATOM	4495	N	ARG	577	49.275	-9.146	6.866	1.00	46.26
	ATOM	4497	CA	ARG	577	47.893	-9.344	7.292	1.00	46.89
	ATOM	4498	CB	ARG	577	47.027	-8.170	6.845	1.00	46.16
	ATOM	4499	CG	ARG	577	47.189	-6.939	7.696	1.00	44.93
	ATOM	4500	CD	ARG	577	46.463	-5.766	7.080	1.00	44.60
5	ATOM	4501	NE	ARG	577	46.284	-4.683	8.039	1.00	45.05
	ATOM	4503	CZ	ARG	577	45.612	-3.565	7.793	1.00	45.95
	ATOM	4504	NH1	ARG	577	45.052	-3.372	6.606	1.00	47.39
	ATOM	4507	NH2	ARG	577	45.466	-2.655	8.749	1.00	45.49
	ATOM	4510	C	ARG	577	47.334	-10.649	6.740	1.00	46.60
	ATOM	4511	O	ARG	577	47.478	-10.933	5.551	1.00	47.15
	ATOM	4512	N	GLN	594	53.312	-14.007	7.967	1.00	63.97
	ATOM	4514	CA	GLN	594	52.110	-14.068	8.799	1.00	63.06
	ATOM	4515	CB	GLN	594	51.175	-15.183	8.319	1.00	64.16
10	ATOM	4516	C	GLN	594	52.501	-14.278	10.258	1.00	61.68
	ATOM	4517	O	GLN	594	53.101	-15.292	10.619	1.00	60.95
	ATOM	4518	N	LEU	595	52.140	-13.313	11.092	1.00	58.58
	ATOM	4520	CA	LEU	595	52.470	-13.335	12.505	1.00	55.58
	ATOM	4521	CB	LEU	595	52.619	-11.902	13.020	1.00	54.05
	ATOM	4522	CG	LEU	595	53.570	-11.074	12.153	1.00	56.23
	ATOM	4523	CD1	LEU	595	53.496	-9.609	12.524	1.00	58.84
	ATOM	4524	CD2	LEU	595	54.977	-11.596	12.301	1.00	55.93
	ATOM	4525	C	LEU	595	51.480	-14.093	13.372	1.00	53.77
15	ATOM	4526	O	LEU	595	50.276	-14.046	13.139	1.00	54.31
	ATOM	4527	N	SER	596	52.012	-14.780	14.377	1.00	51.04
	ATOM	4529	CA	SER	596	51.206	-15.541	15.316	1.00	48.97
	ATOM	4530	CB	SER	596	52.004	-16.737	15.834	1.00	48.39
	ATOM	4531	OG	SER	596	52.945	-16.345	16.820	1.00	48.59
	ATOM	4533	C	SER	596	50.853	-14.641	16.488	1.00	47.56
	ATOM	4534	O	SER	596	51.470	-13.590	16.676	1.00	46.71
	ATOM	4535	N	SER	597	49.888	-15.070	17.292	1.00	47.11
	ATOM	4537	CA	SER	597	49.462	-14.315	18.461	1.00	47.88
20	ATOM	4538	CB	SER	597	48.386	-15.084	19.229	1.00	50.66
	ATOM	4539	OG	SER	597	47.574	-15.839	18.343	1.00	57.08
	ATOM	4541	C	SER	597	50.666	-14.068	19.372	1.00	46.03
	ATOM	4542	O	SER	597	50.735	-13.045	20.047	1.00	46.49
	ATOM	4543	N	LYS	598	51.607	-15.007	19.399	1.00	46.08
	ATOM	4545	CA	LYS	598	52.798	-14.844	20.229	1.00	46.33
	ATOM	4546	CB	LYS	598	53.558	-16.163	20.384	1.00	46.67
	ATOM	4547	CG	LYS	598	54.449	-16.224	21.623	1.00	49.61
	ATOM	4548	CD	LYS	598	55.240	-17.539	21.668	1.00	53.69
25	ATOM	4549	CE	LYS	598	55.899	-17.797	23.026	1.00	53.15
	ATOM	4550	NZ	LYS	598	54.891	-18.076	24.093	1.00	52.02
	ATOM	4554	C	LYS	598	53.706	-13.790	19.599	1.00	45.43
	ATOM	4555	O	LYS	598	54.292	-12.968	20.311	1.00	44.18
	ATOM	4556	N	ASP	599	53.780	-13.804	18.264	1.00	44.16
	ATOM	4558	CA	ASP	599	54.598	-12.851	17.513	1.00	43.46
	ATOM	4559	CB	ASP	599	54.523	-13.098	16.001	1.00	44.83
	ATOM	4560	CG	ASP	599	55.288	-14.336	15.560	1.00	48.24
	ATOM	4561	OD1	ASP	599	56.228	-14.754	16.260	1.00	52.90
30	ATOM	4562	OD2	ASP	599	54.958	-14.894	14.493	1.00	51.43
	ATOM	4563	C	ASP	599	54.120	-11.437	17.796	1.00	42.71
	ATOM	4564	O	ASP	599	54.937	-10.550	18.059	1.00	45.00
	ATOM	4565	N	LEU	600	52.803	-11.235	17.776	1.00	37.69
	ATOM	4567	CA	LEU	600	52.246	-9.918	18.030	1.00	34.03
	ATOM	4568	CB	LEU	600	50.747	-9.882	17.747	1.00	34.06
	ATOM	4569	CG	LEU	600	50.332	-10.068	16.281	1.00	33.13
	ATOM	4570	CD1	LEU	600	48.814	-9.992	16.190	1.00	37.38
	ATOM	4571	CD2	LEU	600	50.974	-9.012	15.373	1.00	25.63
35	ATOM	4572	C	LEU	600	52.537	-9.452	19.439	1.00	34.58
	ATOM	4573	O	LEU	600	52.910	-8.294	19.636	1.00	33.18
	ATOM	4574	N	VAL	601	52.415	-10.348	20.419	1.00	34.24
	ATOM	4576	CA	VAL	601	52.692	-9.969	21.808	1.00	35.80
	ATOM	4577	CB	VAL	601	52.214	-11.036	22.827	1.00	37.50

	ATOM	4578	CG1	VAL	601	52.331	-10.483	24.252	1.00	38.08	
	ATOM	4579	CG2	VAL	601	50.766	-11.409	22.560	1.00	40.77	
	ATOM	4580	C	VAL	601	54.198	-9.741	21.982	1.00	35.04	
	ATOM	4581	O	VAL	601	54.634	-8.856	22.731	1.00	34.33	
	ATOM	4582	N	SER	602	54.981	-10.531	21.262	1.00	32.58	
	ATOM	4584	CA	SER	602	56.421	-10.421	21.307	1.00	36.01	
	ATOM	4585	CB	SER	602	57.045	-11.504	20.439	1.00	38.43	
5	ATOM	4586	OG	SER	602	58.453	-11.387	20.419	1.00	43.36	
	ATOM	4588	C	SER	602	56.809	-9.038	20.800	1.00	35.21	
	ATOM	4589	O	SER	602	57.651	-8.363	21.394	1.00	35.03	
	ATOM	4590	N	CYS	603	56.183	-8.614	19.707	1.00	34.15	
	ATOM	4592	CA	CYS	603	56.438	-7.294	19.141	1.00	34.04	
	ATOM	4593	CB	CYS	603	55.543	-7.055	17.925	1.00	33.45	
	ATOM	4594	SG	CYS	603	55.653	-5.423	17.229	0.50	32.19	PRT1
	ATOM	4595	C	CYS	603	56.198	-6.211	20.191	1.00	32.79	
	ATOM	4596	O	CYS	603	57.023	-5.316	20.362	1.00	33.36	
10	ATOM	4597	N	ALA	604	55.088	-6.321	20.917	1.00	31.31	
	ATOM	4599	CA	ALA	604	54.743	-5.358	21.965	1.00	32.36	
	ATOM	4600	CB	ALA	604	53.321	-5.610	22.481	1.00	32.01	
	ATOM	4601	C	ALA	604	55.741	-5.394	23.128	1.00	32.83	
	ATOM	4602	O	ALA	604	56.050	-4.358	23.727	1.00	30.89	
	ATOM	4603	N	TYR	605	56.212	-6.592	23.465	1.00	32.95	
	ATOM	4605	CA	TYR	605	57.189	-6.758	24.539	1.00	33.34	
	ATOM	4606	CB	TYR	605	57.500	-8.236	24.737	1.00	32.58	
	ATOM	4607	CG	TYR	605	58.640	-8.495	25.690	1.00	32.51	
15	ATOM	4608	CD1	TYR	605	58.511	-8.236	27.053	1.00	33.50	
	ATOM	4609	CE1	TYR	605	59.556	-8.507	27.943	1.00	37.08	
	ATOM	4610	CD2	TYR	605	59.841	-9.026	25.230	1.00	34.22	
	ATOM	4611	CE2	TYR	605	60.896	-9.300	26.109	1.00	36.64	
	ATOM	4612	CZ	TYR	605	60.746	-9.042	27.464	1.00	37.56	
	ATOM	4613	OH	TYR	605	61.776	-9.342	28.336	1.00	38.08	
	ATOM	4615	C	TYR	605	58.480	-6.006	24.191	1.00	32.42	
	ATOM	4616	O	TYR	605	58.975	-5.203	24.991	1.00	33.34	
	ATOM	4617	N	GLN	606	58.997	-6.267	22.989	1.00	30.61	
20	ATOM	4619	CA	GLN	606	60.218	-5.643	22.474	1.00	31.12	
	ATOM	4620	CB	GLN	606	60.499	-6.143	21.058	1.00	30.57	
	ATOM	4621	CG	GLN	606	61.044	-7.568	21.008	1.00	33.90	
	ATOM	4622	CD	GLN	606	61.240	-8.080	19.593	1.00	32.17	
	ATOM	4623	OE1	GLN	606	62.155	-7.652	18.883	1.00	32.55	
	ATOM	4624	NE2	GLN	606	60.374	-8.998	19.171	1.00	33.10	
	ATOM	4627	C	GLN	606	60.157	-4.114	22.487	1.00	31.69	
	ATOM	4628	O	GLN	606	61.111	-3.453	22.910	1.00	31.18	
	ATOM	4629	N	VAL	607	59.035	-3.564	22.020	1.00	29.50	
25	ATOM	4631	CA	VAL	607	58.816	-2.122	22.000	1.00	27.54	
	ATOM	4632	CB	VAL	607	57.454	-1.751	21.306	1.00	26.79	
	ATOM	4633	CG1	VAL	607	57.131	-0.291	21.516	1.00	24.80	
	ATOM	4634	CG2	VAL	607	57.505	-2.050	19.815	1.00	22.95	
	ATOM	4635	C	VAL	607	58.827	-1.576	23.432	1.00	28.30	
	ATOM	4636	O	VAL	607	59.469	-0.548	23.705	1.00	28.32	
	ATOM	4637	N	ALA	608	58.110	-2.247	24.340	1.00	27.21	
	ATOM	4639	CA	ALA	608	58.061	-1.805	25.735	1.00	26.54	
	ATOM	4640	CB	ALA	608	57.070	-2.649	26.550	1.00	26.70	
30	ATOM	4641	C	ALA	608	59.457	-1.850	26.368	1.00	25.97	
	ATOM	4642	O	ALA	608	59.802	-0.993	27.183	1.00	25.88	
	ATOM	4643	N	ARG	609	60.250	-2.848	25.994	1.00	26.02	
	ATOM	4645	CA	ARG	609	61.606	-2.977	26.512	1.00	30.44	
	ATOM	4646	CB	ARG	609	62.234	-4.285	26.058	1.00	34.09	
	ATOM	4647	CG	ARG	609	61.642	-5.516	26.682	1.00	39.24	
	ATOM	4648	CD	ARG	609	62.659	-6.615	26.615	1.00	42.75	
	ATOM	4649	NE	ARG	609	63.405	-6.704	27.860	1.00	45.52	
	ATOM	4651	CZ	ARG	609	64.525	-7.405	28.019	1.00	46.24	
35	ATOM	4652	NH1	ARG	609	65.055	-8.079	27.001	1.00	41.48	
	ATOM	4655	NH2	ARG	609	65.079	-7.482	29.225	1.00	47.49	
	ATOM	4658	C	ARG	609	62.478	-1.829	26.015	1.00	34.20	
	ATOM	4659	O	ARG	609	63.265	-1.255	26.788	1.00	35.24	
	ATOM	4660	N	GLY	610	62.368	-1.528	24.717	1.00	33.25	

	ATOM	4662	CA	GLY	610	63.130	-0.439	24.138	1.00	29.57
	ATOM	4663	C	GLY	610	62.802	0.814	24.908	1.00	29.31
	ATOM	4664	O	GLY	610	63.695	1.543	25.335	1.00	27.46
	ATOM	4665	N	MET	611	61.507	1.020	25.147	1.00	31.07
	ATOM	4667	CA	MET	611	61.016	2.178	25.889	1.00	30.09
	ATOM	4668	CB	MET	611	59.493	2.280	25.782	1.00	29.51
	ATOM	4669	CG	MET	611	58.997	2.655	24.404	1.00	28.21
5	ATOM	4670	SD	MET	611	59.760	4.175	23.787	1.00	29.00
	ATOM	4671	CE	MET	611	59.350	5.335	25.039	1.00	25.91
	ATOM	4672	C	MET	611	61.439	2.189	27.361	1.00	30.47
	ATOM	4673	O	MET	611	61.734	3.242	27.919	1.00	29.43
	ATOM	4674	N	GLU	612	61.429	1.031	28.002	1.00	31.97
	ATOM	4676	CA	GLU	612	61.836	0.947	29.402	1.00	35.34
	ATOM	4677	CB	GLU	612	61.707	-0.490	29.574	1.00	36.17
	ATOM	4678	CG	GLU	612	62.305	-0.729	31.278	1.00	34.87
	ATOM	4679	CD	GLU	612	62.259	-2.185	31.705	1.00	32.68
10	ATOM	4680	OE1	GLU	612	62.641	-3.070	30.904	1.00	35.01
	ATOM	4681	OE2	GLU	612	61.848	-2.443	32.858	1.00	36.56
	ATOM	4682	C	GLU	612	63.296	1.425	29.490	1.00	35.26
	ATOM	4683	O	GLU	612	63.677	2.162	30.417	1.00	31.21
	ATOM	4684	N	TYR	613	64.092	1.040	28.491	1.00	36.10
	ATOM	4686	CA	TYR	613	65.491	1.458	28.440	1.00	34.76
	ATOM	4687	CB	TYR	613	66.249	0.728	27.301	1.00	31.15
	ATOM	4688	CG	TYR	613	67.700	1.195	27.284	1.00	34.28
	ATOM	4689	CD1	TYR	613	68.600	0.654	28.207	1.00	36.50
15	ATOM	4690	CE1	TYR	613	69.949	1.035	28.219	1.00	38.20
	ATOM	4691	CD2	TYR	613	68.179	2.135	26.366	1.00	32.99
	ATOM	4692	CE2	TYR	613	69.520	2.526	26.372	1.00	33.32
	ATOM	4693	CZ	TYR	613	70.399	1.968	27.302	1.00	36.59
	ATOM	4694	OH	TYR	613	71.721	2.340	27.333	1.00	35.73
	ATOM	4696	C	TYR	613	65.583	2.970	28.273	1.00	34.03
	ATOM	4697	O	TYR	613	66.231	3.643	29.075	1.00	35.26
	ATOM	4698	N	LEU	614	64.916	3.503	27.250	1.00	31.78
20	ATOM	4700	CA	LEU	614	64.945	4.937	26.998	1.00	29.50
	ATOM	4701	CB	LEU	614	64.095	5.297	25.775	1.00	28.26
	ATOM	4702	CG	LEU	614	64.564	4.742	24.422	1.00	31.29
	ATOM	4703	CD1	LEU	614	63.564	5.089	23.321	1.00	28.09
	ATOM	4704	CD2	LEU	614	65.951	5.282	24.079	1.00	29.52
	ATOM	4705	C	LEU	614	64.489	5.715	28.224	1.00	32.49
	ATOM	4706	O	LEU	614	65.108	6.717	28.598	1.00	31.73
	ATOM	4707	N	ALA	615	63.431	5.232	28.872	1.00	33.06
	ATOM	4709	CA	ALA	615	62.906	5.870	30.070	1.00	35.16
	ATOM	4710	CB	ALA	615	61.598	5.192	30.511	1.00	36.64
25	ATOM	4711	C	ALA	615	63.942	5.838	31.202	1.00	35.36
	ATOM	4712	O	ALA	615	64.065	6.805	31.952	1.00	36.80
	ATOM	4713	N	SER	616	64.690	4.739	31.315	1.00	35.91
	ATOM	4715	CA	SER	616	65.716	4.621	32.354	1.00	35.78
	ATOM	4716	CB	SER	616	66.287	3.199	32.424	1.00	32.52
	ATOM	4717	OG	SER	616	67.133	2.899	31.324	1.00	29.64
	ATOM	4719	C	SER	616	66.832	5.623	32.063	1.00	37.48
	ATOM	4720	O	SER	616	67.556	6.048	32.967	1.00	38.76
	ATOM	4721	N	LYS	617	66.971	5.980	30.790	1.00	34.74
30	ATOM	4723	CA	LYS	617	67.973	6.931	30.357	1.00	32.44
	ATOM	4724	CB	LYS	617	68.540	6.520	28.998	1.00	32.94
	ATOM	4725	CG	LYS	617	69.330	5.232	29.041	1.00	32.64
	ATOM	4726	CD	LYS	617	70.539	5.402	29.933	1.00	38.45
	ATOM	4727	CE	LYS	617	71.252	4.091	30.139	1.00	40.84
	ATOM	4728	NZ	LYS	617	72.552	4.306	30.812	1.00	46.49
	ATOM	4732	C	LYS	617	67.376	8.325	30.281	1.00	33.29
	ATOM	4733	O	LYS	617	67.909	9.188	29.598	1.00	33.95
	ATOM	4734	N	LYS	618	66.245	8.528	30.952	1.00	34.87
35	ATOM	4736	CA	LYS	618	65.569	9.822	30.997	1.00	35.44
	ATOM	4737	CB	LYS	618	66.512	10.868	31.581	1.00	40.44
	ATOM	4738	CG	LYS	618	67.192	10.446	32.877	1.00	48.19
	ATOM	4739	CD	LYS	618	66.234	10.363	34.037	1.00	55.47
	ATOM	4740	CE	LYS	618	66.962	9.939	35.310	1.00	61.56

	ATOM	4741	NZ	LYS	618	66.070	10.032	36.514	1.00	68.82
	ATOM	4745	C	LYS	618	65.015	10.327	29.663	1.00	35.62
	ATOM	4746	O	LYS	618	64.557	11.463	29.569	1.00	36.44
	ATOM	4747	N	CYS	619	65.006	9.472	28.647	1.00	34.24
	ATOM	4749	CA	CYS	619	64.525	9.848	27.323	1.00	31.62
	ATOM	4750	CB	CYS	619	65.279	9.033	26.263	1.00	31.17
	ATOM	4751	SG	CYS	619	64.816	9.306	24.541	1.00	30.02
5	ATOM	4752	C	CYS	619	63.004	9.701	27.149	1.00	30.45
	ATOM	4753	O	CYS	619	62.418	8.649	27.388	1.00	29.24
	ATOM	4754	N	ILE	620	62.359	10.798	26.800	1.00	30.14
	ATOM	4756	CA	ILE	620	60.935	10.822	26.542	1.00	31.76
	ATOM	4757	CB	ILE	620	60.268	12.040	27.193	1.00	31.26
	ATOM	4758	CG2	ILE	620	58.799	12.116	26.774	1.00	31.66
	ATOM	4759	CG1	ILE	620	60.392	11.957	28.712	1.00	29.71
	ATOM	4760	CD1	ILE	620	60.016	13.236	29.396	1.00	27.40
	ATOM	4761	C	ILE	620	60.864	10.961	25.023	1.00	31.86
10	ATOM	4762	O	ILE	620	61.384	11.920	24.465	1.00	32.70
	ATOM	4763	N	HIS	621	60.249	9.986	24.366	1.00	31.70
	ATOM	4765	CA	HIS	621	60.133	9.973	22.906	1.00	32.12
	ATOM	4766	CB	HIS	621	59.708	8.578	22.430	1.00	29.61
	ATOM	4767	CG	HIS	621	59.903	8.344	20.961	1.00	28.62
	ATOM	4768	CD2	HIS	621	60.511	7.336	20.300	1.00	27.49
	ATOM	4769	ND1	HIS	621	59.373	9.168	19.988	1.00	30.08
	ATOM	4771	CE1	HIS	621	59.637	8.669	18.795	1.00	25.00
	ATOM	4772	NE2	HIS	621	60.325	7.554	18.956	1.00	26.55
15	ATOM	4774	C	HIS	621	59.194	11.026	22.321	1.00	34.51
	ATOM	4775	O	HIS	621	59.466	11.570	21.251	1.00	36.79
	ATOM	4776	N	ARG	622	58.048	11.248	22.960	1.00	35.26
	ATOM	4778	CA	ARG	622	57.068	12.239	22.490	1.00	34.68
	ATOM	4779	CB	ARG	622	57.705	13.628	22.370	1.00	33.43
	ATOM	4780	CG	ARG	622	58.285	14.135	23.674	1.00	31.52
	ATOM	4781	CD	ARG	622	58.781	15.563	23.570	0.50	27.82
	ATOM	4782	NE	ARG	622	59.216	16.050	24.876	0.50	28.82
	ATOM	4784	CZ	ARG	622	60.362	15.715	25.463	0.50	30.41
20	ATOM	4785	NH1	ARG	622	61.215	14.891	24.860	0.50	31.15
	ATOM	4788	NH2	ARG	622	60.640	16.168	26.680	0.50	30.83
	ATOM	4791	C	ARG	622	56.283	11.891	21.213	1.00	34.71
	ATOM	4792	O	ARG	622	55.289	12.544	20.912	1.00	35.58
	ATOM	4793	N	ASP	623	56.719	10.884	20.459	1.00	34.90
	ATOM	4795	CA	ASP	623	55.986	10.468	19.261	1.00	34.30
	ATOM	4796	CB	ASP	623	56.443	11.212	17.994	1.00	36.76
	ATOM	4797	CG	ASP	623	55.535	10.918	16.772	1.00	43.35
	ATOM	4798	OD1	ASP	623	55.980	11.131	15.624	1.00	47.64
25	ATOM	4799	OD2	ASP	623	54.376	10.469	16.954	1.00	43.30
	ATOM	4800	C	ASP	623	56.094	8.967	19.051	1.00	32.24
	ATOM	4801	O	ASP	623	56.406	8.494	17.957	1.00	31.19
	ATOM	4802	N	LEU	624	55.895	8.209	20.118	1.00	32.27
	ATOM	4804	CA	LEU	624	55.964	6.759	20.005	1.00	33.18
	ATOM	4805	CB	LEU	624	56.013	6.118	21.390	1.00	31.16
	ATOM	4806	CG	LEU	624	56.019	4.592	21.452	1.00	32.74
	ATOM	4807	CD1	LEU	624	57.257	4.020	20.765	1.00	30.64
	ATOM	4808	CD2	LEU	624	55.974	4.177	22.904	1.00	34.51
30	ATOM	4809	C	LEU	624	54.738	6.274	19.217	1.00	35.18
	ATOM	4810	O	LEU	624	53.589	6.511	19.612	1.00	35.72
	ATOM	4811	N	ALA	625	54.997	5.632	18.084	1.00	32.37
	ATOM	4813	CA	ALA	625	53.946	5.113	17.223	1.00	30.60
	ATOM	4814	CB	ALA	625	53.447	6.205	16.298	1.00	25.26
	ATOM	4815	C	ALA	625	54.618	4.020	16.427	1.00	29.87
	ATOM	4816	O	ALA	625	55.839	3.978	16.378	1.00	32.01
	ATOM	4817	N	ALA	626	53.834	3.163	15.779	1.00	30.12
	ATOM	4819	CA	ALA	626	54.373	2.057	14.978	1.00	29.62
35	ATOM	4820	CB	ALA	626	53.231	1.159	14.441	1.00	27.11
	ATOM	4821	C	ALA	626	55.255	2.552	13.838	1.00	26.57
	ATOM	4822	O	ALA	626	56.193	1.871	13.434	1.00	26.29
	ATOM	4823	N	ARG	627	54.935	3.730	13.317	1.00	26.74
	ATOM	4825	CA	ARG	627	55.706	4.352	12.244	1.00	28.73

	ATOM	4826	CB	ARG	627	55.056	5.671	11.827	1.00	29.62
	ATOM	4827	CG	ARG	627	54.894	6.659	12.972	1.00	31.84
	ATOM	4828	CD	ARG	627	54.435	8.032	12.485	1.00	38.54
	ATOM	4829	NE	ARG	627	53.987	8.878	13.590	1.00	38.59
	ATOM	4831	CZ	ARG	627	52.745	8.879	14.064	1.00	39.55
	ATOM	4832	NH1	ARG	627	51.822	8.094	13.525	1.00	35.96
	ATOM	4835	NH2	ARG	627	52.447	9.604	15.127	1.00	41.05
5	ATOM	4838	C	ARG	627	57.151	4.632	12.676	1.00	30.79
	ATOM	4839	O	ARG	627	58.058	4.687	11.838	1.00	30.16
	ATOM	4840	N	ASN	628	57.347	4.822	13.985	1.00	30.31
	ATOM	4842	CA	ASN	628	58.661	5.109	14.550	1.00	28.50
	ATOM	4843	CB	ASN	628	58.587	6.257	15.549	1.00	27.84
	ATOM	4844	CG	ASN	628	58.369	7.571	14.868	1.00	31.41
	ATOM	4845	OD1	ASN	628	58.893	7.796	13.782	1.00	33.45
	ATOM	4846	ND2	ASN	628	57.551	8.429	15.460	1.00	28.53
	ATOM	4849	C	ASN	628	59.352	3.919	15.169	1.00	28.10
10	ATOM	4850	O	ASN	628	60.232	4.076	16.021	1.00	28.64
	ATOM	4851	N	VAL	629	58.887	2.733	14.803	1.00	27.79
	ATOM	4853	CA	VAL	629	59.484	1.482	15.253	1.00	28.30
	ATOM	4854	CB	VAL	629	58.475	0.577	15.983	1.00	25.38
	ATOM	4855	CG1	VAL	629	59.118	-0.753	16.284	1.00	23.07
	ATOM	4856	CG2	VAL	629	57.980	1.246	17.265	1.00	22.48
	ATOM	4857	C	VAL	629	59.925	0.810	13.949	1.00	28.69
	ATOM	4858	O	VAL	629	59.114	0.616	13.043	1.00	27.07
	ATOM	4859	N	LEU	630	61.220	0.542	13.823	1.00	29.54
15	ATOM	4861	CA	LEU	630	61.749	-0.081	12.616	1.00	30.17
	ATOM	4862	CB	LEU	630	62.999	0.659	12.142	1.00	29.62
	ATOM	4863	CG	LEU	630	62.831	2.180	12.035	1.00	29.14
	ATOM	4864	CD1	LEU	630	64.121	2.795	11.579	1.00	29.83
	ATOM	4865	CD2	LEU	630	61.693	2.543	11.086	1.00	32.59
	ATOM	4866	C	LEU	630	62.036	-1.541	12.899	1.00	30.50
	ATOM	4867	O	LEU	630	62.290	-1.910	14.042	1.00	31.06
	ATOM	4868	N	VAL	631	61.966	-2.376	11.866	1.00	33.03
	ATOM	4870	CA	VAL	631	62.174	-3.813	12.022	1.00	31.83
20	ATOM	4871	CB	VAL	631	60.902	-4.605	11.582	1.00	29.48
	ATOM	4872	CG1	VAL	631	61.017	-6.067	11.980	1.00	29.39
	ATOM	4873	CG2	VAL	631	59.644	-3.984	12.196	1.00	25.38
	ATOM	4874	C	VAL	631	63.379	-4.242	11.196	1.00	32.37
	ATOM	4875	O	VAL	631	63.508	-3.865	10.024	1.00	33.57
	ATOM	4876	N	THR	632	64.285	-4.987	11.820	1.00	34.39
	ATOM	4878	CA	THR	632	65.504	-5.453	11.145	1.00	35.84
	ATOM	4879	CB	THR	632	66.659	-5.685	12.148	1.00	33.11
	ATOM	4880	OG1	THR	632	66.328	-6.774	13.020	1.00	34.88
25	ATOM	4882	CG2	THR	632	66.922	-4.426	12.972	1.00	28.85
	ATOM	4883	C	THR	632	65.272	-6.738	10.350	1.00	37.63
	ATOM	4884	O	THR	632	64.195	-7.347	10.439	1.00	37.20
	ATOM	4885	N	GLU	633	66.289	-7.163	9.600	1.00	39.78
	ATOM	4887	CA	GLU	633	66.182	-8.379	8.794	1.00	43.30
	ATOM	4888	CB	GLU	633	67.437	-8.590	7.933	1.00	46.66
	ATOM	4889	CG	GLU	633	67.336	-9.729	6.876	1.00	51.37
	ATOM	4890	CD	GLU	633	66.490	-9.404	5.622	1.00	54.30
	ATOM	4891	OE1	GLU	633	65.859	-8.327	5.523	1.00	55.85
30	ATOM	4892	OE2	GLU	633	66.460	-10.256	4.710	1.00	55.95
	ATOM	4893	C	GLU	633	65.919	-9.592	9.677	1.00	42.72
	ATOM	4894	O	GLU	633	65.360	-10.582	9.222	1.00	45.10
	ATOM	4895	N	ASP	634	66.287	-9.494	10.949	1.00	42.83
	ATOM	4897	CA	ASP	634	66.075	-10.585	11.884	1.00	43.03
	ATOM	4898	CB	ASP	634	67.324	-10.809	12.743	1.00	49.02
	ATOM	4899	CG	ASP	634	68.539	-11.240	11.916	1.00	55.95
	ATOM	4900	OD1	ASP	634	68.462	-12.292	11.237	1.00	59.10
	ATOM	4901	OD2	ASP	634	69.568	-10.525	11.943	1.00	59.41
35	ATOM	4902	C	ASP	634	64.848	-10.340	12.751	1.00	41.75
	ATOM	4903	O	ASP	634	64.737	-10.873	13.847	1.00	42.79
	ATOM	4904	N	ASN	635	63.937	-9.508	12.257	1.00	42.51
	ATOM	4906	CA	ASN	635	62.686	-9.186	12.939	1.00	42.53
	ATOM	4907	CB	ASN	635	61.768	-10.417	12.992	1.00	45.07

	ATOM	4908	CG	ASN	635	61.483	-10.985	11.624	1.00	46.54
	ATOM	4909	OD1	ASN	635	60.868	-10.336	10.786	1.00	49.77
	ATOM	4910	ND2	ASN	635	61.949	-12.192	11.383	1.00	49.29
	ATOM	4913	C	ASN	635	62.801	-8.577	14.331	1.00	40.51
	ATOM	4914	O	ASN	635	61.939	-8.800	15.187	1.00	41.80
	ATOM	4915	N	VAL	636	63.844	-7.795	14.561	1.00	37.98
	ATOM	4917	CA	VAL	636	64.016	-7.164	15.856	1.00	33.92
5	ATOM	4918	CB	VAL	636	65.517	-7.005	16.195	1.00	32.21
	ATOM	4919	CG1	VAL	636	65.697	-6.284	17.530	1.00	31.40
	ATOM	4920	CG2	VAL	636	66.169	-8.367	16.242	1.00	30.93
	ATOM	4921	C	VAL	636	63.349	-5.797	15.811	1.00	31.85
	ATOM	4922	O	VAL	636	63.531	-5.061	14.849	1.00	33.47
	ATOM	4923	N	MET	637	62.525	-5.492	16.807	1.00	31.69
	ATOM	4925	CA	MET	637	61.860	-4.194	16.879	1.00	31.44
	ATOM	4926	CB	MET	637	60.642	-4.241	17.820	1.00	34.97
	ATOM	4927	CG	MET	637	59.559	-5.264	17.455	1.00	36.80
10	ATOM	4928	SD	MET	637	58.860	-5.048	15.803	1.00	35.45
	ATOM	4929	CE	MET	637	59.030	-6.709	15.116	1.00	32.12
	ATOM	4930	C	MET	637	62.874	-3.209	17.454	1.00	31.86
	ATOM	4931	O	MET	637	63.512	-3.496	18.479	1.00	29.47
	ATOM	4932	N	LYS	638	62.985	-2.041	16.820	1.00	30.87
	ATOM	4934	CA	LYS	638	63.915	-0.994	17.244	1.00	29.66
	ATOM	4935	CB	LYS	638	65.161	-0.983	16.349	1.00	27.51
	ATOM	4936	CG	LYS	638	66.171	-2.059	16.691	1.00	27.29
	ATOM	4937	CD	LYS	638	67.370	-1.984	15.781	1.00	28.55
15	ATOM	4938	CE	LYS	638	68.409	-3.029	16.150	1.00	24.75
	ATOM	4939	NZ	LYS	638	68.964	-2.785	17.498	1.00	25.59
	ATOM	4943	C	LYS	638	63.283	0.383	17.215	1.00	27.72
	ATOM	4944	O	LYS	638	62.918	0.869	16.146	1.00	27.66
	ATOM	4945	N	ILE	639	63.163	1.004	18.387	1.00	26.21
	ATOM	4947	CA	ILE	639	62.597	2.343	18.501	1.00	26.27
	ATOM	4948	CB	ILE	639	62.580	2.862	19.965	1.00	26.52
	ATOM	4949	CG2	ILE	639	61.896	4.206	20.017	1.00	21.50
	ATOM	4950	CG1	ILE	639	61.918	1.854	20.926	1.00	25.70
20	ATOM	4951	CD1	ILE	639	60.496	1.494	20.599	1.00	25.62
	ATOM	4952	C	ILE	639	63.505	3.288	17.718	1.00	29.56
	ATOM	4953	O	ILE	639	64.730	3.281	17.906	1.00	27.74
	ATOM	4954	N	ALA	640	62.897	4.101	16.857	1.00	27.91
	ATOM	4956	CA	ALA	640	63.620	5.071	16.042	1.00	28.79
	ATOM	4957	CB	ALA	640	63.377	4.796	14.563	1.00	26.74
	ATOM	4958	C	ALA	640	63.164	6.487	16.385	1.00	28.91
	ATOM	4959	O	ALA	640	62.087	6.683	16.956	1.00	28.67
	ATOM	4960	N	ASP	641	64.007	7.464	16.067	1.00	28.25
25	ATOM	4962	CA	ASP	641	63.708	8.876	16.296	1.00	30.80
	ATOM	4963	CB	ASP	641	62.520	9.319	15.428	1.00	33.44
	ATOM	4964	CG	ASP	641	62.869	9.393	13.948	1.00	38.01
	ATOM	4965	OD1	ASP	641	64.002	9.001	13.574	1.00	42.41
	ATOM	4966	OD2	ASP	641	62.006	9.847	13.160	1.00	41.74
	ATOM	4967	C	ASP	641	63.501	9.311	17.745	1.00	29.07
	ATOM	4968	O	ASP	641	62.847	10.309	18.020	1.00	28.42
	ATOM	4969	N	PHE	642	64.138	8.604	18.663	1.00	29.69
	ATOM	4971	CA	PHE	642	64.036	8.914	20.074	1.00	29.62
30	ATOM	4972	CB	PHE	642	64.347	7.656	20.890	1.00	27.18
	ATOM	4973	CG	PHE	642	65.702	7.058	20.603	1.00	23.96
	ATOM	4974	CD1	PHE	642	66.848	7.559	21.219	1.00	23.66
	ATOM	4975	CD2	PHE	642	65.828	5.974	19.742	1.00	24.08
	ATOM	4976	CE1	PHE	642	68.090	6.992	20.980	1.00	23.02
	ATOM	4977	CE2	PHE	642	67.069	5.403	19.501	1.00	23.20
	ATOM	4978	CZ	PHE	642	68.200	5.909	20.121	1.00	21.68
	ATOM	4979	C	PHE	642	64.948	10.075	20.502	1.00	32.99
	ATOM	4980	O	PHE	642	64.755	10.664	21.574	1.00	32.10
35	ATOM	4981	N	GLY	643	65.940	10.396	19.671	1.00	34.66
	ATOM	4983	CA	GLY	643	66.869	11.463	20.003	1.00	35.29
	ATOM	4984	C	GLY	643	66.639	12.755	19.250	1.00	39.13
	ATOM	4985	O	GLY	643	67.464	13.666	19.333	1.00	39.83
	ATOM	4986	N	LEU	644	65.520	12.850	18.532	1.00	42.26

	ATOM	4988	CA	LEU	644	65.202	14.043	17.745	1.00	46.25
	ATOM	4989	CB	LEU	644	63.935	13.843	16.911	1.00	44.59
	ATOM	4990	CG	LEU	644	63.911	12.839	15.763	1.00	43.00
	ATOM	4991	CD1	LEU	644	62.653	13.068	14.940	1.00	42.61
	ATOM	4992	CD2	LEU	644	65.119	13.016	14.889	1.00	45.65
	ATOM	4993	C	LEU	644	65.037	15.298	18.578	1.00	49.59
	ATOM	4994	O	LEU	644	64.391	15.281	19.623	1.00	51.90
5	ATOM	4995	N	ALA	645	65.585	16.401	18.080	1.00	52.08
	ATOM	4997	CA	ALA	645	65.495	17.677	18.777	1.00	54.71
	ATOM	4998	CB	ALA	645	66.414	18.699	18.124	1.00	54.38
	ATOM	4999	C	ALA	645	64.053	18.184	18.790	1.00	55.44
	ATOM	5000	O	ALA	645	63.534	18.582	19.832	1.00	56.69
	ATOM	5001	N	ASP	652	52.389	21.543	14.759	1.00	73.74
	ATOM	5003	CA	ASP	652	51.207	21.745	13.934	1.00	73.83
	ATOM	5004	CB	ASP	652	51.601	21.995	12.472	1.00	73.22
	ATOM	5005	CG	ASP	652	50.398	22.241	11.569	1.00	72.95
10	ATOM	5006	OD1	ASP	652	49.354	22.715	12.065	1.00	73.71
	ATOM	5007	OD2	ASP	652	50.497	21.956	10.357	1.00	73.02
	ATOM	5008	C	ASP	652	50.321	20.514	14.042	1.00	75.11
	ATOM	5009	O	ASP	652	50.568	19.495	13.394	1.00	75.96
	ATOM	5010	N	TYR	653	49.272	20.628	14.849	1.00	75.57
	ATOM	5012	CA	TYR	653	48.348	19.524	15.064	1.00	75.68
	ATOM	5013	CB	TYR	653	47.274	19.914	16.088	1.00	76.85
	ATOM	5014	CG	TYR	653	47.771	19.995	17.519	1.00	79.55
	ATOM	5015	CD1	TYR	653	46.983	20.567	18.518	1.00	80.89
15	ATOM	5016	CE1	TYR	653	47.438	20.648	19.836	1.00	83.02
	ATOM	5017	CD2	TYR	653	49.032	19.503	17.874	1.00	80.87
	ATOM	5018	CE2	TYR	653	49.496	19.578	19.183	1.00	81.70
	ATOM	5019	CZ	TYR	653	48.698	20.152	20.160	1.00	83.09
	ATOM	5020	OH	TYR	653	49.165	20.243	21.451	1.00	83.73
	ATOM	5022	C	TYR	653	47.685	19.038	13.787	1.00	75.03
	ATOM	5023	O	TYR	653	47.232	17.897	13.711	1.00	75.97
	ATOM	5024	N	TYR	654	47.679	19.885	12.767	1.00	73.85
20	ATOM	5026	CA	TYR	654	47.039	19.538	11.507	1.00	73.32
	ATOM	5027	CB	TYR	654	46.276	20.750	10.972	1.00	71.97
	ATOM	5028	CG	TYR	654	45.259	21.276	11.954	1.00	70.94
	ATOM	5029	CD1	TYR	654	45.659	21.801	13.185	1.00	71.41
	ATOM	5030	CE1	TYR	654	44.733	22.234	14.121	1.00	73.60
	ATOM	5031	CD2	TYR	654	43.899	21.206	11.680	1.00	71.81
	ATOM	5032	CE2	TYR	654	42.956	21.642	12.610	1.00	74.81
	ATOM	5033	CZ	TYR	654	43.380	22.152	13.832	1.00	74.84
	ATOM	5034	OH	TYR	654	42.457	22.571	14.769	1.00	76.60
	ATOM	5036	C	TYR	654	47.975	18.967	10.446	1.00	73.82
25	ATOM	5037	O	TYR	654	47.545	18.671	9.329	1.00	74.25
	ATOM	5038	N	LYS	655	49.249	18.806	10.784	1.00	74.04
	ATOM	5040	CA	LYS	655	50.195	18.256	9.827	1.00	75.41
	ATOM	5041	CB	LYS	655	51.626	18.680	10.164	1.00	78.45
	ATOM	5042	CG	LYS	655	52.647	18.198	9.151	1.00	83.01
	ATOM	5043	CD	LYS	655	54.062	18.589	9.537	1.00	87.72
	ATOM	5044	CE	LYS	655	55.076	17.813	8.703	1.00	91.45
	ATOM	5045	NZ	LYS	655	56.489	18.133	9.074	1.00	94.17
	ATOM	5049	C	LYS	655	50.075	16.736	9.832	1.00	75.50
30	ATOM	5050	O	LYS	655	50.245	16.092	10.872	1.00	75.90
	ATOM	5051	N	LYS	656	49.750	16.173	8.672	1.00	75.26
	ATOM	5053	CA	LYS	656	49.597	14.730	8.533	1.00	74.97
	ATOM	5054	CB	LYS	656	48.723	14.406	7.323	1.00	75.40
	ATOM	5055	CG	LYS	656	47.266	14.753	7.519	1.00	76.87
	ATOM	5056	CD	LYS	656	46.489	14.535	6.239	1.00	80.75
	ATOM	5057	CE	LYS	656	45.001	14.655	6.483	1.00	83.60
	ATOM	5058	NZ	LYS	656	44.236	14.637	5.204	1.00	87.14
	ATOM	5062	C	LYS	656	50.939	14.016	8.414	1.00	74.58
35	ATOM	5063	O	LYS	656	51.904	14.578	7.897	1.00	75.01
	ATOM	5064	N	GLY	660	49.137	9.764	5.736	1.00	59.18
	ATOM	5066	CA	GLY	660	48.106	10.781	5.848	1.00	56.19
	ATOM	5067	C	GLY	660	47.407	10.761	7.192	1.00	55.31
	ATOM	5068	O	GLY	660	46.289	11.263	7.328	1.00	56.96

	ATOM	5069	N	ARG	661	48.059	10.163	8.183	1.00	53.02
	ATOM	5071	CA	ARG	661	47.493	10.083	9.527	1.00	49.80
	ATOM	5072	CB	ARG	661	47.944	8.799	10.229	1.00	51.79
	ATOM	5073	CG	ARG	661	47.683	7.523	9.450	1.00	50.59
	ATOM	5074	CD	ARG	661	47.822	6.323	10.367	1.00	53.68
	ATOM	5075	NE	ARG	661	47.714	5.044	9.665	1.00	52.66
	ATOM	5077	CZ	ARG	661	47.928	3.863	10.236	1.00	51.73
5	ATOM	5078	NH1	ARG	661	48.264	3.794	11.518	1.00	50.23
	ATOM	5081	NH2	ARG	661	47.800	2.751	9.528	1.00	52.58
	ATOM	5084	C	ARG	661	47.915	11.297	10.346	1.00	44.80
	ATOM	5085	O	ARG	661	48.865	11.998	9.986	1.00	43.61
	ATOM	5086	N	LEU	662	47.221	11.528	11.453	1.00	40.74
	ATOM	5088	CA	LEU	662	47.518	12.654	12.333	1.00	37.88
	ATOM	5089	CB	LEU	662	46.234	13.415	12.611	1.00	36.19
	ATOM	5090	CG	LEU	662	45.515	14.074	11.499	1.00	35.32
	ATOM	5091	CD1	LEU	662	44.045	14.278	11.831	1.00	31.05
10	ATOM	5092	CD2	LEU	662	46.217	15.383	11.156	1.00	34.37
	ATOM	5093	C	LEU	662	48.162	12.170	13.622	1.00	35.34
	ATOM	5094	O	LEU	662	47.529	11.479	14.417	1.00	33.06
	ATOM	5095	N	PRO	663	49.441	12.518	13.843	1.00	36.39
	ATOM	5096	CD	PRO	663	50.375	13.113	12.868	1.00	37.57
	ATOM	5097	CA	PRO	663	50.158	12.107	15.054	1.00	36.39
	ATOM	5098	CB	PRO	663	51.516	12.787	14.885	1.00	36.98
	ATOM	5099	CG	PRO	663	51.728	12.657	13.401	1.00	38.48
	ATOM	5100	C	PRO	663	49.477	12.491	16.371	1.00	35.47
15	ATOM	5101	O	PRO	663	49.699	11.841	17.392	1.00	35.08
	ATOM	5102	N	VAL	664	48.646	13.532	16.362	1.00	34.28
	ATOM	5104	CA	VAL	664	47.951	13.931	17.583	1.00	34.43
	ATOM	5105	CB	VAL	664	47.038	15.181	17.376	1.00	36.92
	ATOM	5106	CG1	VAL	664	47.885	16.408	17.160	1.00	37.55
	ATOM	5107	CG2	VAL	664	46.091	14.989	16.186	1.00	38.28
	ATOM	5108	C	VAL	664	47.137	12.749	18.120	1.00	33.03
	ATOM	5109	O	VAL	664	46.908	12.641	19.318	1.00	34.62
	ATOM	5110	N	LYS	665	46.803	11.809	17.236	1.00	32.47
20	ATOM	5112	CA	LYS	665	46.040	10.631	17.614	1.00	30.71
	ATOM	5113	CB	LYS	665	45.456	9.958	16.370	1.00	29.59
	ATOM	5114	CG	LYS	665	44.324	10.774	15.768	1.00	29.64
	ATOM	5115	CD	LYS	665	43.927	10.334	14.367	1.00	31.86
	ATOM	5116	CE	LYS	665	42.664	11.056	13.899	1.00	30.42
	ATOM	5117	NZ	LYS	665	42.296	10.720	12.486	1.00	26.50
	ATOM	5121	C	LYS	665	46.801	9.644	18.498	1.00	32.23
	ATOM	5122	O	LYS	665	46.230	8.659	18.955	1.00	30.04
	ATOM	5123	N	TRP	666	48.080	9.915	18.748	1.00	31.38
25	ATOM	5125	CA	TRP	666	48.886	9.068	19.619	1.00	32.32
	ATOM	5126	CB	TRP	666	50.204	8.682	18.945	1.00	31.07
	ATOM	5127	CG	TRP	666	50.078	7.530	18.006	1.00	28.26
	ATOM	5128	CD2	TRP	666	49.531	7.559	16.684	1.00	27.07
	ATOM	5129	CE2	TRP	666	49.630	6.257	16.163	1.00	26.71
	ATOM	5130	CE3	TRP	666	48.982	8.569	15.882	1.00	26.56
	ATOM	5131	CD1	TRP	666	50.473	6.238	18.234	1.00	24.97
	ATOM	5132	NE1	TRP	666	50.206	5.469	17.132	1.00	27.38
	ATOM	5134	CZ2	TRP	666	49.190	5.929	14.874	1.00	27.22
30	ATOM	5135	CZ3	TRP	666	48.548	8.248	14.599	1.00	30.14
	ATOM	5136	CH2	TRP	666	48.658	6.934	14.107	1.00	26.64
	ATOM	5137	C	TRP	666	49.203	9.802	20.913	1.00	33.84
	ATOM	5138	O	TRP	666	49.688	9.202	21.873	1.00	32.82
	ATOM	5139	N	MET	667	48.905	11.099	20.929	1.00	35.75
	ATOM	5141	CA	MET	667	49.180	11.960	22.069	1.00	37.60
	ATOM	5142	CB	MET	667	49.150	13.423	21.641	1.00	41.95
	ATOM	5143	CG	MET	667	50.487	13.975	21.226	1.00	48.44
	ATOM	5144	SD	MET	667	50.384	15.728	20.919	1.00	55.33
35	ATOM	5145	CE	MET	667	50.711	15.745	19.183	1.00	49.29
	ATOM	5146	C	MET	667	48.294	11.802	23.289	1.00	38.98
	ATOM	5147	O	MET	667	47.066	11.699	23.183	1.00	39.18
	ATOM	5148	N	ALA	668	48.933	11.824	24.456	1.00	38.72
	ATOM	5150	CA	ALA	668	48.231	11.728	25.727	1.00	37.82

	ATOM	5151	CB	ALA	668	49.224	11.527	26.857	1.00	38.49
	ATOM	5152	C	ALA	668	47.497	13.051	25.891	1.00	38.16
	ATOM	5153	O	ALA	668	47.937	14.072	25.363	1.00	37.21
	ATOM	5154	N	PRO	669	46.383	13.062	26.644	1.00	39.78
	ATOM	5155	CD	PRO	669	45.785	11.931	27.367	1.00	40.08
	ATOM	5156	CA	PRO	669	45.598	14.281	26.858	1.00	40.68
	ATOM	5157	CB	PRO	669	44.474	13.806	27.782	1.00	42.15
5	ATOM	5158	CG	PRO	669	44.346	12.352	27.446	1.00	42.56
	ATOM	5159	C	PRO	669	46.398	15.432	27.484	1.00	42.69
	ATOM	5160	O	PRO	669	46.320	16.566	27.019	1.00	42.14
	ATOM	5161	N	GLU	670	47.168	15.153	28.532	1.00	43.21
	ATOM	5163	CA	GLU	670	47.956	16.211	29.160	1.00	44.62
	ATOM	5164	CB	GLU	670	48.651	15.719	30.429	1.00	44.95
	ATOM	5165	CG	GLU	670	49.824	14.782	30.197	1.00	45.54
	ATOM	5166	CD	GLU	670	49.422	13.332	30.079	1.00	42.72
	ATOM	5167	OE1	GLU	670	50.332	12.481	30.066	1.00	41.43
10	ATOM	5168	OE2	GLU	670	48.212	13.036	30.015	1.00	44.44
	ATOM	5169	C	GLU	670	48.993	16.772	28.195	1.00	44.88
	ATOM	5170	O	GLU	670	49.248	17.968	28.194	1.00	45.08
	ATOM	5171	N	ALA	671	49.565	15.908	27.358	1.00	44.75
	ATOM	5173	CA	ALA	671	50.573	16.323	26.392	1.00	45.92
	ATOM	5174	CB	ALA	671	51.256	15.095	25.766	1.00	44.10
	ATOM	5175	C	ALA	671	49.944	17.193	25.314	1.00	47.96
	ATOM	5176	O	ALA	671	50.526	18.192	24.894	1.00	49.16
	ATOM	5177	N	LEU	672	48.729	16.836	24.917	1.00	49.84
15	ATOM	5179	CA	LEU	672	47.989	17.554	23.881	1.00	50.74
	ATOM	5180	CB	LEU	672	46.926	16.619	23.289	1.00	53.20
	ATOM	5181	CG	LEU	672	46.184	16.989	22.004	1.00	55.26
	ATOM	5182	CD1	LEU	672	47.153	17.155	20.856	1.00	57.12
	ATOM	5183	CD2	LEU	672	45.203	15.895	21.680	1.00	52.86
	ATOM	5184	C	LEU	672	47.327	18.826	24.408	1.00	50.79
	ATOM	5185	O	LEU	672	47.302	19.855	23.736	1.00	50.95
	ATOM	5186	N	PHE	673	46.792	18.751	25.618	1.00	52.07
	ATOM	5188	CA	PHE	673	46.111	19.884	26.226	1.00	54.39
20	ATOM	5189	CB	PHE	673	44.892	19.396	27.019	1.00	51.21
	ATOM	5190	CG	PHE	673	43.871	18.656	26.186	1.00	48.49
	ATOM	5191	CD1	PHE	673	43.304	17.473	26.646	1.00	47.79
	ATOM	5192	CD2	PHE	673	43.470	19.149	24.949	1.00	49.04
	ATOM	5193	CE1	PHE	673	42.349	16.789	25.888	1.00	47.90
	ATOM	5194	CE2	PHE	673	42.511	18.473	24.182	1.00	49.71
	ATOM	5195	CZ	PHE	673	41.952	17.288	24.655	1.00	46.86
	ATOM	5196	C	PHE	673	47.007	20.741	27.123	1.00	58.25
	ATOM	5197	O	PHE	673	47.000	21.971	27.034	1.00	60.52
25	ATOM	5198	N	ASP	674	47.784	20.094	27.983	1.00	59.63
	ATOM	5200	CA	ASP	674	48.652	20.815	28.905	1.00	62.11
	ATOM	5201	CB	ASP	674	48.568	20.196	30.307	1.00	63.81
	ATOM	5202	CG	ASP	674	47.143	20.015	30.791	1.00	66.46
	ATOM	5203	OD1	ASP	674	46.815	18.901	31.247	1.00	66.70
	ATOM	5204	OD2	ASP	674	46.354	20.981	30.722	1.00	68.77
	ATOM	5205	C	ASP	674	50.119	20.852	28.482	1.00	63.36
	ATOM	5206	O	ASP	674	50.979	21.175	29.310	1.00	64.11
	ATOM	5207	N	ARG	675	50.410	20.486	27.228	1.00	62.94
30	ATOM	5209	CA	ARG	675	51.789	20.456	26.706	1.00	60.75
	ATOM	5210	CB	ARG	675	52.277	21.874	26.360	1.00	60.56
	ATOM	5211	CG	ARG	675	51.474	22.560	25.261	1.00	63.67
	ATOM	5212	CD	ARG	675	51.986	23.970	24.964	1.00	66.99
	ATOM	5213	NE	ARG	675	53.308	23.980	24.337	1.00	69.34
	ATOM	5215	CZ	ARG	675	54.063	25.068	24.173	1.00	68.48
	ATOM	5216	NH1	ARG	675	53.637	26.254	24.590	1.00	65.81
	ATOM	5219	NH2	ARG	675	55.254	24.965	23.593	1.00	68.76
	ATOM	5222	C	ARG	675	52.750	19.793	27.700	1.00	58.06
35	ATOM	5223	O	ARG	675	53.933	20.130	27.766	1.00	59.30
	ATOM	5224	N	ILE	676	52.221	18.859	28.483	1.00	55.62
	ATOM	5226	CA	ILE	676	52.992	18.141	29.489	1.00	54.09
	ATOM	5227	CB	ILE	676	52.154	17.921	30.765	1.00	52.69
	ATOM	5228	CG2	ILE	676	52.749	16.811	31.629	1.00	49.38

	ATOM	5229	CG1	ILE	676	52.049	19.230	31.540	1.00	53.15
	ATOM	5230	CD1	ILE	676	51.306	19.103	32.845	1.00	57.79
	ATOM	5231	C	ILE	676	53.468	16.796	28.953	1.00	53.83
	ATOM	5232	O	ILE	676	52.668	15.891	28.730	1.00	54.87
	ATOM	5233	N	TYR	677	54.773	16.671	28.745	1.00	51.76
	ATOM	5235	CA	TYR	677	55.343	15.436	28.236	1.00	49.42
	ATOM	5236	CB	TYR	677	56.232	15.722	27.031	1.00	51.33
5	ATOM	5237	CG	TYR	677	55.466	16.181	25.809	1.00	56.22
	ATOM	5238	CD1	TYR	677	55.158	17.529	25.619	1.00	56.12
	ATOM	5239	CE1	TYR	677	54.491	17.960	24.479	1.00	56.18
	ATOM	5240	CD2	TYR	677	55.078	15.269	24.823	1.00	58.13
	ATOM	5241	CE2	TYR	677	54.411	15.689	23.679	1.00	57.65
	ATOM	5242	CZ	TYR	677	54.125	17.035	23.512	1.00	58.23
	ATOM	5243	OH	TYR	677	53.504	17.457	22.360	1.00	61.71
	ATOM	5245	C	TYR	677	56.136	14.730	29.316	1.00	46.46
	ATOM	5246	O	TYR	677	56.983	15.335	29.970	1.00	48.65
10	ATOM	5247	N	THR	678	55.818	13.464	29.537	1.00	41.73
	ATOM	5249	CA	THR	678	56.498	12.664	30.535	1.00	39.83
	ATOM	5250	CB	THR	678	55.680	12.593	31.861	1.00	41.78
	ATOM	5251	OG1	THR	678	54.462	11.867	31.642	1.00	45.77
	ATOM	5253	CG2	THR	678	55.342	13.988	32.383	1.00	41.84
	ATOM	5254	C	THR	678	56.661	11.242	30.011	1.00	37.46
	ATOM	5255	O	THR	678	56.258	10.917	28.897	1.00	37.51
	ATOM	5256	N	HIS	679	57.264	10.388	30.825	1.00	36.36
	ATOM	5258	CA	HIS	679	57.423	9.003	30.457	1.00	35.91
15	ATOM	5259	CB	HIS	679	58.348	8.294	31.439	1.00	35.05
	ATOM	5260	CG	HIS	679	59.761	8.798	31.404	1.00	37.68
	ATOM	5261	CD2	HIS	679	60.453	9.569	32.278	1.00	37.89
	ATOM	5262	ND1	HIS	679	60.632	8.507	30.380	1.00	37.49
	ATOM	5264	CE1	HIS	679	61.803	9.071	30.621	1.00	39.58
	ATOM	5265	NE2	HIS	679	61.721	9.722	31.766	1.00	39.81
	ATOM	5267	C	HIS	679	56.032	8.376	30.441	1.00	36.76
	ATOM	5268	O	HIS	679	55.771	7.458	29.660	1.00	37.16
20	ATOM	5269	N	GLN	680	55.126	8.908	31.264	1.00	36.27
	ATOM	5271	CA	GLN	680	53.754	8.407	31.332	1.00	37.71
	ATOM	5272	CB	GLN	680	53.069	8.815	32.640	1.00	40.95
	ATOM	5273	CG	GLN	680	53.645	8.128	33.884	1.00	45.23
	ATOM	5274	CD	GLN	680	53.676	6.595	33.780	1.00	44.44
	ATOM	5275	OE1	GLN	680	52.669	5.925	33.996	1.00	42.76
	ATOM	5276	NE2	GLN	680	54.846	6.043	33.464	1.00	40.57
	ATOM	5279	C	GLN	680	52.927	8.842	30.121	1.00	37.54
	ATOM	5280	O	GLN	680	51.950	8.185	29.765	1.00	37.93
	ATOM	5281	N	SER	681	53.282	9.961	29.504	1.00	36.38
25	ATOM	5283	CA	SER	681	52.563	10.367	28.306	1.00	38.05
	ATOM	5284	CB	SER	681	52.857	11.819	27.940	1.00	41.41
	ATOM	5285	OG	SER	681	54.239	12.069	27.938	1.00	42.92
	ATOM	5287	C	SER	681	52.991	9.421	27.178	1.00	37.92
	ATOM	5288	O	SER	681	52.205	9.148	26.263	1.00	37.21
	ATOM	5289	N	ASP	682	54.237	8.932	27.248	1.00	34.77
	ATOM	5291	CA	ASP	682	54.750	7.972	26.267	1.00	31.99
	ATOM	5292	CB	ASP	682	56.243	7.683	26.481	1.00	31.08
	ATOM	5293	CG	ASP	682	57.165	8.638	25.721	1.00	33.63
30	ATOM	5294	OD1	ASP	682	58.386	8.503	25.920	1.00	32.35
	ATOM	5295	OD2	ASP	682	56.707	9.500	24.930	1.00	29.46
	ATOM	5296	C	ASP	682	53.969	6.672	26.457	1.00	31.54
	ATOM	5297	O	ASP	682	53.675	5.971	25.493	1.00	29.94
	ATOM	5298	N	VAL	683	53.677	6.334	27.712	1.00	30.48
	ATOM	5300	CA	VAL	683	52.913	5.126	28.023	1.00	32.94
	ATOM	5301	CB	VAL	683	52.731	4.939	29.572	1.00	33.94
	ATOM	5302	CG1	VAL	683	51.635	3.905	29.872	1.00	32.71
	ATOM	5303	CG2	VAL	683	54.042	4.474	30.209	1.00	27.41
35	ATOM	5304	C	VAL	683	51.545	5.164	27.299	1.00	32.27
	ATOM	5305	O	VAL	683	51.106	4.158	26.733	1.00	30.54
	ATOM	5306	N	TRP	684	50.902	6.332	27.282	1.00	32.57
	ATOM	5308	CA	TRP	684	49.616	6.477	26.600	1.00	32.76
	ATOM	5309	CB	TRP	684	49.060	7.895	26.765	1.00	33.67

	ATOM	5310	CG	TRP	684	47.855	8.210	25.891	1.00	38.22
	ATOM	5311	CD2	TRP	684	46.503	8.435	26.328	1.00	39.96
	ATOM	5312	CE2	TRP	684	45.734	8.735	25.177	1.00	39.59
	ATOM	5313	CE3	TRP	684	45.869	8.416	27.578	1.00	39.26
	ATOM	5314	CD1	TRP	684	47.842	8.373	24.528	1.00	39.02
	ATOM	5315	NE1	TRP	684	46.576	8.687	24.096	1.00	38.42
	ATOM	5317	CZ2	TRP	684	44.362	9.011	25.240	1.00	36.62
5	ATOM	5318	CZ3	TRP	684	44.502	8.691	27.641	1.00	40.70
	ATOM	5319	CH2	TRP	684	43.766	8.982	26.475	1.00	40.57
	ATOM	5320	C	TRP	684	49.819	6.158	25.125	1.00	31.98
	ATOM	5321	O	TRP	684	49.066	5.367	24.557	1.00	32.43
	ATOM	5322	N	SER	685	50.859	6.748	24.529	1.00	29.63
	ATOM	5324	CA	SER	685	51.195	6.531	23.119	1.00	28.62
	ATOM	5325	CB	SER	685	52.457	7.296	22.751	1.00	24.72
	ATOM	5326	OG	SER	685	52.323	8.664	23.072	1.00	30.04
	ATOM	5328	C	SER	685	51.414	5.055	22.825	1.00	27.91
10	ATOM	5329	O	SER	685	51.022	4.555	21.767	1.00	28.60
	ATOM	5330	N	PHE	686	52.063	4.372	23.763	1.00	27.96
	ATOM	5332	CA	PHE	686	52.333	2.947	23.662	1.00	27.03
	ATOM	5333	CB	PHE	686	53.163	2.499	24.868	1.00	25.79
	ATOM	5334	CG	PHE	686	53.440	1.029	24.890	1.00	26.25
	ATOM	5335	CD1	PHE	686	54.252	0.451	23.923	1.00	27.32
	ATOM	5336	CD2	PHE	686	52.839	0.208	25.841	1.00	26.22
	ATOM	5337	CE1	PHE	686	54.464	-0.930	23.900	1.00	25.87
	ATOM	5338	CE2	PHE	686	53.046	-1.170	25.828	1.00	24.37
15	ATOM	5339	CZ	PHE	686	53.856	-1.740	24.854	1.00	26.42
	ATOM	5340	C	PHE	686	51.003	2.160	23.596	1.00	28.82
	ATOM	5341	O	PHE	686	50.912	1.129	22.914	1.00	26.74
	ATOM	5342	N	GLY	687	49.991	2.636	24.324	1.00	29.52
	ATOM	5344	CA	GLY	687	48.688	1.982	24.302	1.00	31.57
	ATOM	5345	C	GLY	687	48.095	2.036	22.896	1.00	30.73
	ATOM	5346	O	GLY	687	47.490	1.069	22.414	1.00	29.83
	ATOM	5347	N	VAL	688	48.269	3.179	22.238	1.00	29.06
	ATOM	5349	CA	VAL	688	47.777	3.350	20.879	1.00	28.93
20	ATOM	5350	CB	VAL	688	47.800	4.831	20.424	1.00	27.24
	ATOM	5351	CG1	VAL	688	47.211	4.963	19.020	1.00	28.29
	ATOM	5352	CG2	VAL	688	46.990	5.691	21.404	1.00	26.96
	ATOM	5353	C	VAL	688	48.612	2.475	19.951	1.00	28.49
	ATOM	5354	O	VAL	688	48.080	1.866	19.024	1.00	28.84
	ATOM	5355	N	LEU	689	49.905	2.350	20.252	1.00	27.99
	ATOM	5357	CA	LEU	689	50.804	1.512	19.461	1.00	26.14
	ATOM	5358	CB	LEU	689	52.268	1.688	19.911	1.00	27.31
	ATOM	5359	CG	LEU	689	53.368	1.014	19.065	1.00	26.60
25	ATOM	5360	CD1	LEU	689	54.688	1.767	19.175	1.00	28.19
	ATOM	5361	CD2	LEU	689	53.567	-0.401	19.475	1.00	25.55
	ATOM	5362	C	LEU	689	50.362	0.053	19.605	1.00	26.48
	ATOM	5363	O	LEU	689	50.377	-0.686	18.626	1.00	27.06
	ATOM	5364	N	LEU	690	49.953	-0.344	20.816	1.00	28.55
	ATOM	5366	CA	LEU	690	49.465	-1.708	21.085	1.00	29.16
	ATOM	5367	CB	LEU	690	49.070	-1.888	22.560	1.00	31.40
	ATOM	5368	CG	LEU	690	50.114	-2.085	23.667	1.00	31.49
	ATOM	5369	CD1	LEU	690	49.427	-2.028	25.026	1.00	34.09
30	ATOM	5370	CD2	LEU	690	50.821	-3.410	23.491	1.00	30.84
	ATOM	5371	C	LEU	690	48.240	-1.958	20.220	1.00	26.51
	ATOM	5372	O	LEU	690	48.088	-3.023	19.631	1.00	25.15
	ATOM	5373	N	TRP	691	47.376	-0.954	20.139	1.00	28.51
	ATOM	5375	CA	TRP	691	46.169	-1.049	19.319	1.00	29.56
	ATOM	5376	CB	TRP	691	45.332	0.227	19.465	1.00	28.91
	ATOM	5377	CG	TRP	691	43.992	0.169	18.759	1.00	30.95
	ATOM	5378	CD2	TRP	691	43.718	0.556	17.406	1.00	29.87
	ATOM	5379	CE2	TRP	691	42.337	0.367	17.189	1.00	31.97
35	ATOM	5380	CE3	TRP	691	44.505	1.049	16.358	1.00	27.72
	ATOM	5381	CD1	TRP	691	42.796	-0.231	19.292	1.00	30.68
	ATOM	5382	NE1	TRP	691	41.797	-0.111	18.355	1.00	33.68
	ATOM	5384	CZ2	TRP	691	41.729	0.652	15.967	1.00	29.42
	ATOM	5385	CZ3	TRP	691	43.906	1.327	15.154	1.00	27.13

	ATOM	5386	CH2	TRP	691	42.523	1.129	14.965	1.00	29.18
	ATOM	5387	C	TRP	691	46.564	-1.289	17.856	1.00	28.78
	ATOM	5388	O	TRP	691	45.996	-2.156	17.194	1.00	27.64
	ATOM	5389	N	GLU	692	47.564	-0.543	17.380	1.00	29.83
	ATOM	5391	CA	GLU	692	48.078	-0.669	16.018	1.00	28.08
	ATOM	5392	CB	GLU	692	49.267	0.262	15.790	1.00	26.40
	ATOM	5393	CG	GLU	692	48.945	1.735	15.680	1.00	26.45
5	ATOM	5394	CD	GLU	692	50.183	2.561	15.369	1.00	29.47
	ATOM	5395	OE1	GLU	692	50.938	2.886	16.320	1.00	29.66
	ATOM	5396	OE2	GLU	692	50.413	2.875	14.182	1.00	29.44
	ATOM	5397	C	GLU	692	48.563	-2.082	15.761	1.00	30.07
	ATOM	5398	O	GLU	692	48.385	-2.612	14.665	1.00	30.18
	ATOM	5399	N	ILE	693	49.244	-2.663	16.746	1.00	29.87
	ATOM	5401	CA	ILE	693	49.754	-4.024	16.608	1.00	29.51
	ATOM	5402	CB	ILE	693	50.632	-4.443	17.828	1.00	28.18
	ATOM	5403	CG2	ILE	693	51.037	-5.907	17.706	1.00	27.45
10	ATOM	5404	CG1	ILE	693	51.907	-3.594	17.890	1.00	26.99
	ATOM	5405	CD1	ILE	693	52.663	-3.747	19.194	1.00	25.37
	ATOM	5406	C	ILE	693	48.603	-5.023	16.452	1.00	29.21
	ATOM	5407	O	ILE	693	48.568	-5.807	15.512	1.00	27.89
	ATOM	5408	N	PHE	694	47.623	-4.942	17.336	1.00	31.33
	ATOM	5410	CA	PHE	694	46.523	-5.888	17.279	1.00	34.41
	ATOM	5411	CB	PHE	694	45.958	-6.114	18.687	1.00	35.37
	ATOM	5412	CG	PHE	694	46.978	-6.717	19.621	1.00	35.60
	ATOM	5413	CD1	PHE	694	47.606	-5.942	20.586	1.00	37.23
15	ATOM	5414	CD2	PHE	694	47.424	-8.024	19.426	1.00	35.59
	ATOM	5415	CE1	PHE	694	48.669	-6.460	21.333	1.00	36.39
	ATOM	5416	CE2	PHE	694	48.484	-8.546	20.170	1.00	35.34
	ATOM	5417	CZ	PHE	694	49.110	-7.762	21.118	1.00	35.71
	ATOM	5418	C	PHE	694	45.481	-5.715	16.176	1.00	34.41
	ATOM	5419	O	PHE	694	44.623	-6.579	15.982	1.00	34.48
	ATOM	5420	N	THR	695	45.617	-4.637	15.404	1.00	33.03
	ATOM	5422	CA	THR	695	44.742	-4.379	14.263	1.00	31.81
	ATOM	5423	CB	THR	695	44.113	-2.957	14.278	1.00	29.75
20	ATOM	5424	OG1	THR	695	45.142	-1.961	14.218	1.00	30.72
	ATOM	5426	CG2	THR	695	43.254	-2.759	15.524	1.00	29.40
	ATOM	5427	C	THR	695	45.596	-4.533	13.011	1.00	31.44
	ATOM	5428	O	THR	695	45.153	-4.241	11.906	1.00	33.00
	ATOM	5429	N	LEU	696	46.832	-4.987	13.209	1.00	31.24
	ATOM	5431	CA	LEU	696	47.799	-5.199	12.134	1.00	31.36
	ATOM	5432	CB	LEU	696	47.421	-6.418	11.291	1.00	33.53
	ATOM	5433	CG	LEU	696	47.270	-7.741	12.042	1.00	33.00
	ATOM	5434	CD1	LEU	696	47.010	-8.838	11.052	1.00	35.50
25	ATOM	5435	CD2	LEU	696	48.515	-8.061	12.830	1.00	36.09
	ATOM	5436	C	LEU	696	48.066	-3.976	11.249	1.00	30.84
	ATOM	5437	O	LEU	696	48.135	-4.067	10.024	1.00	28.23
	ATOM	5438	N	GLY	697	48.302	-2.839	11.890	1.00	31.54
	ATOM	5440	CA	GLY	697	48.591	-1.632	11.141	1.00	33.87
	ATOM	5441	C	GLY	697	47.375	-0.765	10.924	1.00	32.77
	ATOM	5442	O	GLY	697	47.322	0.042	9.994	1.00	33.90
	ATOM	5443	N	GLY	698	46.392	-0.921	11.797	1.00	33.29
	ATOM	5445	CA	GLY	698	45.187	-0.122	11.681	1.00	32.66
30	ATOM	5446	C	GLY	698	45.408	1.368	11.877	1.00	30.57
	ATOM	5447	O	GLY	698	46.336	1.803	12.553	1.00	27.36
	ATOM	5448	N	SER	699	44.517	2.148	11.285	1.00	30.92
	ATOM	5450	CA	SER	699	44.552	3.595	11.376	1.00	32.19
	ATOM	5451	CB	SER	699	44.062	4.202	10.058	1.00	34.24
	ATOM	5452	OG	SER	699	44.019	5.616	10.123	1.00	38.67
	ATOM	5454	C	SER	699	43.644	4.014	12.538	1.00	31.81
	ATOM	5455	O	SER	699	42.431	3.759	12.525	1.00	31.39
	ATOM	5456	N	PRO	700	44.228	4.597	13.594	1.00	31.82
35	ATOM	5457	CD	PRO	700	45.645	4.842	13.919	1.00	28.82
	ATOM	5458	CA	PRO	700	43.353	4.992	14.697	1.00	31.31
	ATOM	5459	CB	PRO	700	44.345	5.341	15.809	1.00	31.31
	ATOM	5460	CG	PRO	700	45.552	5.800	15.061	1.00	30.41
	ATOM	5461	C	PRO	700	42.484	6.170	14.295	1.00	31.19

	ATOM	5462	O	PRO	700	42.899	7.021	13.510	1.00	29.93
	ATOM	5463	N	TYR	701	41.235	6.144	14.736	1.00	32.69
	ATOM	5465	CA	TYR	701	40.291	7.223	14.445	1.00	32.54
	ATOM	5466	CB	TYR	701	40.650	8.416	15.323	1.00	34.47
	ATOM	5467	CG	TYR	701	40.512	8.141	16.794	1.00	39.16
	ATOM	5468	CD1	TYR	701	41.542	8.433	17.683	1.00	44.31
	ATOM	5469	CE1	TYR	701	41.372	8.241	19.060	1.00	46.65
5	ATOM	5470	CD2	TYR	701	39.321	7.642	17.307	1.00	41.21
	ATOM	5471	CE2	TYR	701	39.147	7.447	18.657	1.00	45.05
	ATOM	5472	CZ	TYR	701	40.164	7.750	19.535	1.00	47.24
	ATOM	5473	OH	TYR	701	39.949	7.590	20.886	1.00	52.18
	ATOM	5475	C	TYR	701	40.215	7.655	12.972	1.00	30.56
	ATOM	5476	O	TYR	701	40.379	8.836	12.647	1.00	29.73
	ATOM	5477	N	PRO	702	39.928	6.712	12.058	1.00	30.38
	ATOM	5478	CD	PRO	702	39.659	5.278	12.261	1.00	30.22
	ATOM	5479	CA	PRO	702	39.847	7.071	10.642	1.00	28.87
10	ATOM	5480	CB	PRO	702	39.693	5.722	9.948	1.00	29.63
	ATOM	5481	CG	PRO	702	39.007	4.889	10.959	1.00	30.99
	ATOM	5482	C	PRO	702	38.722	8.048	10.283	1.00	30.88
	ATOM	5483	O	PRO	702	37.557	7.843	10.636	1.00	33.98
	ATOM	5484	N	GLY	703	39.100	9.116	9.584	1.00	29.03
	ATOM	5486	CA	GLY	703	38.154	10.134	9.169	1.00	28.98
	ATOM	5487	C	GLY	703	37.893	11.169	10.244	1.00	29.69
	ATOM	5488	O	GLY	703	37.074	12.068	10.048	1.00	31.71
	ATOM	5489	N	VAL	704	38.579	11.040	11.378	1.00	30.74
15	ATOM	5491	CA	VAL	704	38.416	11.951	12.509	1.00	32.06
	ATOM	5492	CB	VAL	704	38.582	11.208	13.860	1.00	31.70
	ATOM	5493	CG1	VAL	704	38.522	12.197	15.044	1.00	30.29
	ATOM	5494	CG2	VAL	704	37.506	10.144	14.005	1.00	31.56
	ATOM	5495	C	VAL	704	39.430	13.087	12.449	1.00	33.72
	ATOM	5496	O	VAL	704	40.634	12.867	12.548	1.00	35.31
	ATOM	5497	N	PRO	705	38.957	14.309	12.200	1.00	34.23
	ATOM	5498	CD	PRO	705	37.594	14.692	11.787	1.00	33.20
	ATOM	5499	CA	PRO	705	39.875	15.443	12.135	1.00	33.73
20	ATOM	5500	CB	PRO	705	39.053	16.495	11.394	1.00	34.93
	ATOM	5501	CG	PRO	705	37.647	16.187	11.831	1.00	36.93
	ATOM	5502	C	PRO	705	40.280	15.879	13.543	1.00	33.25
	ATOM	5503	O	PRO	705	39.651	15.490	14.532	1.00	31.71
	ATOM	5504	N	VAL	706	41.322	16.697	13.623	1.00	34.46
	ATOM	5506	CA	VAL	706	41.852	17.176	14.900	1.00	36.99
	ATOM	5507	CB	VAL	706	42.923	18.261	14.687	1.00	39.01
	ATOM	5508	CG1	VAL	706	43.577	18.618	16.017	1.00	40.33
	ATOM	5509	CG2	VAL	706	43.961	17.786	13.673	1.00	38.61
25	ATOM	5510	C	VAL	706	40.826	17.716	15.895	1.00	35.65
	ATOM	5511	O	VAL	706	40.823	17.319	17.065	1.00	33.55
	ATOM	5512	N	GLU	707	39.955	18.605	15.426	1.00	36.74
	ATOM	5514	CA	GLU	707	38.941	19.220	16.278	1.00	37.20
	ATOM	5515	CB	GLU	707	38.129	20.242	15.482	1.00	38.98
	ATOM	5516	C	GLU	707	38.014	18.188	16.900	1.00	38.46
	ATOM	5517	O	GLU	707	37.634	18.295	18.074	1.00	39.04
	ATOM	5518	N	GLU	708	37.681	17.170	16.115	1.00	37.81
	ATOM	5520	CA	GLU	708	36.802	16.105	16.571	1.00	37.70
30	ATOM	5521	CB	GLU	708	36.316	15.289	15.378	1.00	40.73
	ATOM	5522	CG	GLU	708	35.459	16.091	14.413	1.00	43.44
	ATOM	5523	CD	GLU	708	34.235	16.677	15.084	1.00	51.52
	ATOM	5524	OE1	GLU	708	33.629	16.007	15.961	1.00	50.14
	ATOM	5525	OE2	GLU	708	33.882	17.824	14.732	1.00	59.46
	ATOM	5526	C	GLU	708	37.506	15.223	17.588	1.00	36.53
	ATOM	5527	O	GLU	708	36.897	14.782	18.567	1.00	36.80
	ATOM	5528	N	LEU	709	38.799	14.993	17.376	1.00	35.69
	ATOM	5530	CA	LEU	709	39.584	14.179	18.301	1.00	35.48
35	ATOM	5531	CB	LEU	709	41.039	14.044	17.830	1.00	34.84
	ATOM	5532	CG	LEU	709	41.921	13.250	18.802	1.00	32.41
	ATOM	5533	CD1	LEU	709	41.608	11.787	18.674	1.00	30.10
	ATOM	5534	CD2	LEU	709	43.378	13.514	18.560	1.00	29.93
	ATOM	5535	C	LEU	709	39.568	14.842	19.673	1.00	35.58

	ATOM	5536	O	LEU	709	39.377	14.177	20.694	1.00	35.43
	ATOM	5537	N	PHE	710	39.792	16.150	19.686	1.00	36.79
	ATOM	5539	CA	PHE	710	39.800	16.918	20.927	1.00	40.58
	ATOM	5540	CB	PHE	710	39.944	18.413	20.637	1.00	42.55
	ATOM	5541	CG	PHE	710	41.308	18.808	20.162	1.00	46.38
	ATOM	5542	CD1	PHE	710	42.392	17.942	20.313	1.00	47.29
	ATOM	5543	CD2	PHE	710	41.515	20.050	19.580	1.00	47.93
5	ATOM	5544	CE1	PHE	710	43.659	18.312	19.892	1.00	51.21
	ATOM	5545	CE2	PHE	710	42.781	20.435	19.155	1.00	50.89
	ATOM	5546	CZ	PHE	710	43.859	19.562	19.312	1.00	53.31
	ATOM	5547	C	PHE	710	38.517	16.676	21.694	1.00	40.14
	ATOM	5548	O	PHE	710	38.543	16.446	22.898	1.00	39.86
	ATOM	5549	N	LYS	711	37.399	16.705	20.977	1.00	41.02
	ATOM	5551	CA	LYS	711	36.101	16.479	21.584	1.00	38.66
	ATOM	5552	CB	LYS	711	34.985	16.803	20.580	1.00	40.75
	ATOM	5553	CG	LYS	711	33.601	16.727	21.181	1.00	46.99
10	ATOM	5554	CD	LYS	711	32.522	17.174	20.218	1.00	50.71
	ATOM	5555	CE	LYS	711	31.163	16.733	20.739	1.00	52.53
	ATOM	5556	NZ	LYS	711	30.041	17.194	19.884	1.00	57.76
	ATOM	5560	C	LYS	711	35.990	15.046	22.120	1.00	38.06
	ATOM	5561	O	LYS	711	35.535	14.831	23.250	1.00	36.29
	ATOM	5562	N	LEU	712	36.431	14.066	21.330	1.00	38.10
	ATOM	5564	CA	LEU	712	36.392	12.662	21.764	1.00	38.69
	ATOM	5565	CB	LEU	712	36.914	11.714	20.672	1.00	37.19
	ATOM	5566	CG	LEU	712	36.070	11.436	19.424	1.00	34.73
15	ATOM	5567	CD1	LEU	712	36.814	10.453	18.524	1.00	35.54
	ATOM	5568	CD2	LEU	712	34.709	10.872	19.818	1.00	30.90
	ATOM	5569	C	LEU	712	37.230	12.472	23.021	1.00	39.62
	ATOM	5570	O	LEU	712	36.843	11.745	23.940	1.00	39.44
	ATOM	5571	N	LEU	713	38.398	13.101	23.044	1.00	40.10
	ATOM	5573	CA	LEU	713	39.279	12.999	24.199	1.00	42.81
	ATOM	5574	CB	LEU	713	40.606	13.716	23.924	1.00	41.70
	ATOM	5575	CG	LEU	713	41.495	13.040	22.868	1.00	41.86
	ATOM	5576	CD1	LEU	713	42.742	13.862	22.607	1.00	37.19
20	ATOM	5577	CD2	LEU	713	41.873	11.647	23.340	1.00	41.17
	ATOM	5578	C	LEU	713	38.577	13.566	25.437	1.00	43.18
	ATOM	5579	O	LEU	713	38.479	12.889	26.457	1.00	44.79
	ATOM	5580	N	LYS	714	38.004	14.760	25.312	1.00	42.75
	ATOM	5582	CA	LYS	714	37.301	15.389	26.425	1.00	43.70
	ATOM	5583	CB	LYS	714	36.842	16.796	26.043	1.00	44.69
	ATOM	5584	CG	LYS	714	38.001	17.746	25.836	1.00	47.92
	ATOM	5585	CD	LYS	714	37.543	19.171	25.583	1.00	55.01
	ATOM	5586	CE	LYS	714	38.733	20.077	25.238	1.00	59.44
25	ATOM	5587	NZ	LYS	714	39.773	20.132	26.320	1.00	60.10
	ATOM	5591	C	LYS	714	36.127	14.557	26.940	1.00	43.94
	ATOM	5592	O	LYS	714	35.843	14.551	28.140	1.00	44.20
	ATOM	5593	N	GLU	715	35.477	13.819	26.046	1.00	43.29
	ATOM	5595	CA	GLU	715	34.350	12.979	26.435	1.00	42.29
	ATOM	5596	CB	GLU	715	33.464	12.682	25.225	1.00	44.91
	ATOM	5597	CG	GLU	715	32.913	13.916	24.522	1.00	51.62
	ATOM	5598	CD	GLU	715	32.020	13.566	23.332	1.00	55.01
	ATOM	5599	OE1	GLU	715	32.343	12.605	22.596	1.00	58.09
30	ATOM	5600	OE2	GLU	715	30.992	14.251	23.136	1.00	55.83
	ATOM	5601	C	GLU	715	34.806	11.665	27.064	1.00	41.07
	ATOM	5602	O	GLU	715	33.982	10.825	27.421	1.00	38.01
	ATOM	5603	N	GLY	716	36.118	11.476	27.182	1.00	41.11
	ATOM	5605	CA	GLY	716	36.642	10.252	27.770	1.00	39.69
	ATOM	5606	C	GLY	716	36.510	9.054	26.847	1.00	39.64
	ATOM	5607	O	GLY	716	36.562	7.904	27.290	1.00	36.71
	ATOM	5608	N	HIS	717	36.359	9.335	25.554	1.00	41.95
	ATOM	5610	CA	HIS	717	36.215	8.300	24.541	1.00	43.32
35	ATOM	5611	CB	HIS	717	35.859	8.918	23.183	1.00	43.38
	ATOM	5612	CG	HIS	717	35.813	7.926	22.060	1.00	44.79
	ATOM	5613	CD2	HIS	717	34.802	7.152	21.596	1.00	44.64
	ATOM	5614	ND1	HIS	717	36.912	7.625	21.285	1.00	46.21
	ATOM	5616	CE1	HIS	717	36.584	6.708	20.392	1.00	46.21

	ATOM	5617	NE2	HIS	717	35.307	6.404	20.561	1.00	45.55
	ATOM	5619	C	HIS	717	37.485	7.481	24.403	1.00	43.90
	ATOM	5620	O	HIS	717	38.581	8.031	24.327	1.00	45.45
	ATOM	5621	N	ARG	718	37.304	6.169	24.289	1.00	43.44
	ATOM	5623	CA	ARG	718	38.387	5.207	24.139	1.00	42.68
	ATOM	5624	CB	ARG	718	38.500	4.361	25.412	1.00	41.00
5	ATOM	5625	CG	ARG	718	38.844	5.165	26.658	1.00	40.09
	ATOM	5626	CD	ARG	718	40.214	5.825	26.495	1.00	41.06
	ATOM	5627	NE	ARG	718	40.658	6.549	27.685	1.00	39.51
	ATOM	5629	CZ	ARG	718	40.521	7.861	27.862	1.00	39.90
	ATOM	5630	NH1	ARG	718	39.940	8.608	26.931	1.00	36.48
	ATOM	5633	NH2	ARG	718	41.024	8.443	28.946	1.00	42.06
	ATOM	5636	C	ARG	718	38.080	4.308	22.927	1.00	43.91
	ATOM	5637	O	ARG	718	36.911	4.007	22.650	1.00	44.40
	ATOM	5638	N	MET	719	39.113	3.933	22.174	1.00	42.56
	ATOM	5640	CA	MET	719	38.928	3.079	21.004	1.00	42.82
10	ATOM	5641	CB	MET	719	40.219	2.964	20.181	1.00	42.59
	ATOM	5642	CG	MET	719	40.595	4.221	19.413	1.00	41.15
	ATOM	5643	SD	MET	719	42.093	4.079	18.400	1.00	44.11
	ATOM	5644	CE	MET	719	43.323	3.949	19.613	1.00	41.33
	ATOM	5645	C	MET	719	38.460	1.694	21.432	1.00	44.74
	ATOM	5646	O	MET	719	38.822	1.216	22.516	1.00	41.56
	ATOM	5647	N	ASP	720	37.635	1.075	20.582	1.00	45.50
	ATOM	5649	CA	ASP	720	37.090	-0.265	20.824	1.00	45.51
	ATOM	5650	CB	ASP	720	36.077	-0.660	19.733	1.00	48.60
15	ATOM	5651	CG	ASP	720	34.811	0.181	19.749	1.00	53.03
	ATOM	5652	OD1	ASP	720	34.678	1.082	20.612	1.00	59.61
	ATOM	5653	OD2	ASP	720	33.943	-0.067	18.880	1.00	50.58
	ATOM	5654	C	ASP	720	38.177	-1.329	20.823	1.00	43.64
	ATOM	5655	O	ASP	720	39.235	-1.172	20.199	1.00	43.66
	ATOM	5656	N	LYS	721	37.876	-2.436	21.487	1.00	42.90
	ATOM	5658	CA	LYS	721	38.784	-3.565	21.555	1.00	42.96
	ATOM	5659	CB	LYS	721	38.278	-4.565	22.587	1.00	42.51
	ATOM	5660	CG	LYS	721	39.000	-5.888	22.570	1.00	47.68
20	ATOM	5661	CD	LYS	721	38.445	-6.805	23.628	1.00	51.61
	ATOM	5662	CE	LYS	721	38.450	-8.246	23.163	1.00	54.96
	ATOM	5663	NZ	LYS	721	38.165	-9.190	24.282	1.00	59.67
	ATOM	5667	C	LYS	721	38.825	-4.215	20.182	1.00	43.05
	ATOM	5668	O	LYS	721	37.779	-4.577	19.625	1.00	46.08
	ATOM	5669	N	PRO	722	40.025	-4.348	19.601	1.00	43.22
	ATOM	5670	CD	PRO	722	41.337	-3.672	20.067	1.00	43.52
	ATOM	5671	CA	PRO	722	40.139	-4.968	18.275	1.00	41.04
	ATOM	5672	CB	PRO	722	41.631	-4.856	17.965	1.00	40.87
25	ATOM	5673	CG	PRO	722	42.074	-3.682	18.764	1.00	42.22
	ATOM	5674	C	PRO	722	39.726	-6.427	18.346	1.00	39.64
	ATOM	5675	O	PRO	722	39.730	-7.023	19.425	1.00	37.12
	ATOM	5676	N	SER	723	39.311	-6.982	17.212	1.00	40.36
	ATOM	5678	CA	SER	723	38.947	-8.389	17.158	1.00	41.41
	ATOM	5679	CB	SER	723	38.205	-8.707	15.865	1.00	38.26
	ATOM	5680	OG	SER	723	39.049	-8.520	14.749	1.00	43.87
	ATOM	5682	C	SER	723	40.294	-9.102	17.191	1.00	41.54
	ATOM	5683	O	SER	723	41.284	-8.575	16.703	1.00	40.90
30	ATOM	5684	N	ASN	724	40.338	-10.300	17.750	1.00	44.89
	ATOM	5686	CA	ASN	724	41.598	-11.019	17.853	1.00	48.14
	ATOM	5687	CB	ASN	724	42.256	-11.202	16.476	1.00	52.43
	ATOM	5688	CG	ASN	724	41.682	-12.374	15.715	1.00	57.29
	ATOM	5689	OD1	ASN	724	41.637	-13.492	16.225	1.00	61.96
	ATOM	5690	ND2	ASN	724	41.218	-12.125	14.500	1.00	60.91
	ATOM	5693	C	ASN	724	42.509	-10.255	18.811	1.00	48.17
	ATOM	5694	O	ASN	724	43.648	-9.918	18.495	1.00	49.88
	ATOM	5695	N	CYS	725	41.960	-9.935	19.973	1.00	47.12
35	ATOM	5697	CA	CYS	725	42.686	-9.238	21.010	1.00	46.17
	ATOM	5698	CB	CYS	725	42.569	-7.717	20.862	1.00	44.83
	ATOM	5699	SG	CYS	725	43.459	-6.813	22.159	1.00	42.51
	ATOM	5700	C	CYS	725	42.017	-9.697	22.294	1.00	45.78
	ATOM	5701	O	CYS	725	40.803	-9.642	22.423	1.00	44.83

	ATOM	5702	N	THR	726	42.810	-10.224	23.212	1.00	45.63
	ATOM	5704	CA	THR	726	42.289	-10.711	24.482	1.00	45.47
	ATOM	5705	CB	THR	726	43.351	-11.545	25.217	1.00	45.93
	ATOM	5706	OG1	THR	726	44.307	-10.651	25.786	1.00	45.04
	ATOM	5708	CG2	THR	726	44.061	-12.495	24.233	1.00	42.99
	ATOM	5709	C	THR	726	41.858	-9.545	25.359	1.00	45.73
5	ATOM	5710	O	THR	726	42.368	-8.445	25.216	1.00	46.91
	ATOM	5711	N	ASN	727	40.914	-9.789	26.257	1.00	45.93
	ATOM	5713	CA	ASN	727	40.448	-8.736	27.141	1.00	47.85
	ATOM	5714	CB	ASN	727	39.300	-9.237	28.022	1.00	54.88
	ATOM	5715	CG	ASN	727	39.629	-10.544	28.731	1.00	65.11
	ATOM	5716	OD1	ASN	727	40.737	-10.734	29.229	1.00	70.58
	ATOM	5717	ND2	ASN	727	38.681	-11.472	28.735	1.00	69.68
	ATOM	5720	C	ASN	727	41.591	-8.212	27.999	1.00	44.18
	ATOM	5721	O	ASN	727	41.594	-7.047	28.390	1.00	41.35
10	ATOM	5722	N	GLU	728	42.572	-9.073	28.260	1.00	42.82
	ATOM	5724	CA	GLU	728	43.725	-8.713	29.071	1.00	42.37
	ATOM	5725	CB	GLU	728	44.573	-9.952	29.379	1.00	43.09
	ATOM	5726	CG	GLU	728	45.806	-9.654	30.245	1.00	48.30
	ATOM	5727	CD	GLU	728	46.643	-10.889	30.568	1.00	50.11
	ATOM	5728	OE1	GLU	728	46.867	-11.732	29.668	1.00	47.98
	ATOM	5729	OE2	GLU	728	47.085	-11.010	31.733	1.00	51.69
	ATOM	5730	C	GLU	728	44.551	-7.652	28.356	1.00	39.57
	ATOM	5731	O	GLU	728	44.852	-6.605	28.933	1.00	39.30
15	ATOM	5732	N	LEU	729	44.872	-7.907	27.089	1.00	37.38
	ATOM	5734	CA	LEU	729	45.655	-6.977	26.274	1.00	36.74
	ATOM	5735	CB	LEU	729	46.027	-7.623	24.935	1.00	35.39
	ATOM	5736	CG	LEU	729	47.137	-8.679	25.001	1.00	35.41
	ATOM	5737	CD1	LEU	729	47.107	-9.553	23.766	1.00	35.69
	ATOM	5738	CD2	LEU	729	48.505	-8.017	25.174	1.00	37.72
	ATOM	5739	C	LEU	729	44.885	-5.679	26.050	1.00	35.52
	ATOM	5740	O	LEU	729	45.467	-4.597	25.941	1.00	33.96
	ATOM	5741	N	TYR	730	43.565	-5.779	26.000	1.00	32.90
20	ATOM	5743	CA	TYR	730	42.760	-4.598	25.812	1.00	32.41
	ATOM	5744	CB	TYR	730	41.335	-4.981	25.398	1.00	32.16
	ATOM	5745	CG	TYR	730	40.445	-3.787	25.172	1.00	34.93
	ATOM	5746	CD1	TYR	730	40.769	-2.827	24.203	1.00	32.49
	ATOM	5747	CE1	TYR	730	39.962	-1.716	23.994	1.00	32.80
	ATOM	5748	CD2	TYR	730	39.282	-3.605	25.931	1.00	33.45
	ATOM	5749	CE2	TYR	730	38.465	-2.496	25.728	1.00	34.81
	ATOM	5750	CZ	TYR	730	38.814	-1.557	24.756	1.00	34.06
	ATOM	5751	OH	TYR	730	38.009	-0.465	24.551	1.00	36.66
25	ATOM	5753	C	TYR	730	42.767	-3.788	27.107	1.00	33.48
	ATOM	5754	O	TYR	730	42.837	-2.558	27.083	1.00	34.94
	ATOM	5755	N	MET	731	42.698	-4.466	28.248	1.00	35.29
	ATOM	5757	CA	MET	731	42.724	-3.755	29.525	1.00	38.38
	ATOM	5758	CB	MET	731	42.465	-4.709	30.690	1.00	42.01
	ATOM	5759	CG	MET	731	41.048	-5.264	30.702	1.00	53.67
	ATOM	5760	SD	MET	731	39.785	-3.965	30.830	1.00	62.97
	ATOM	5761	CE	MET	731	39.828	-3.688	32.641	1.00	61.83
	ATOM	5762	C	MET	731	44.073	-3.049	29.670	1.00	34.52
30	ATOM	5763	O	MET	731	44.160	-1.958	30.232	1.00	33.23
	ATOM	5764	N	MET	732	45.118	-3.669	29.134	1.00	33.93
	ATOM	5766	CA	MET	732	46.445	-3.065	29.168	1.00	36.26
	ATOM	5767	CB	MET	732	47.506	-3.995	28.565	1.00	35.56
	ATOM	5768	CG	MET	732	48.935	-3.418	28.643	1.00	35.26
	ATOM	5769	SD	MET	732	50.186	-4.522	28.001	1.00	30.46
	ATOM	5770	CE	MET	732	50.480	-5.562	29.415	1.00	26.88
	ATOM	5771	C	MET	732	46.369	-1.750	28.389	1.00	34.75
	ATOM	5772	O	MET	732	46.827	-0.722	28.873	1.00	35.49
35	ATOM	5773	N	MET	733	45.741	-1.774	27.213	1.00	34.63
	ATOM	5775	CA	MET	733	45.571	-0.566	26.413	1.00	32.79
	ATOM	5776	CB	MET	733	44.787	-0.853	25.130	1.00	33.16
	ATOM	5777	CG	MET	733	45.544	-1.601	24.047	1.00	32.32
	ATOM	5778	SD	MET	733	44.421	-1.990	22.670	1.00	35.66
	ATOM	5779	CE	MET	733	45.155	-3.496	22.068	1.00	29.47

	ATOM	5780	C	MET	733	44.789	0.452	27.229	1.00	33.94
	ATOM	5781	O	MET	733	45.176	1.619	27.318	1.00	35.72
	ATOM	5782	N	ARG	734	43.679	0.018	27.818	1.00	33.73
	ATOM	5784	CA	ARG	734	42.854	0.913	28.621	1.00	33.41
	ATOM	5785	CB	ARG	734	41.586	0.197	29.095	1.00	33.42
	ATOM	5786	CG	ARG	734	40.726	-0.335	27.950	1.00	34.26
	ATOM	5787	CD	ARG	734	40.256	0.783	27.043	1.00	37.70
5	ATOM	5788	NE	ARG	734	39.416	1.745	27.750	1.00	43.98
	ATOM	5790	CZ	ARG	734	38.092	1.661	27.844	1.00	46.43
	ATOM	5791	NH1	ARG	734	37.439	0.660	27.268	1.00	48.63
	ATOM	5794	NH2	ARG	734	37.420	2.571	28.530	1.00	44.65
	ATOM	5797	C	ARG	734	43.660	1.458	29.793	1.00	32.12
	ATOM	5798	O	ARG	734	43.492	2.610	30.180	1.00	35.37
	ATOM	5799	N	ASP	735	44.566	0.646	30.327	1.00	33.75
	ATOM	5801	CA	ASP	735	45.438	1.076	31.433	1.00	36.72
	ATOM	5802	CB	ASP	735	46.379	-0.055	31.857	1.00	42.71
10	ATOM	5803	CG	ASP	735	45.722	-1.052	32.774	1.00	47.31
	ATOM	5804	OD1	ASP	735	46.124	-2.241	32.720	1.00	50.99
	ATOM	5805	OD2	ASP	735	44.824	-0.646	33.552	1.00	48.45
	ATOM	5806	C	ASP	735	46.291	2.251	30.972	1.00	34.25
	ATOM	5807	O	ASP	735	46.376	3.286	31.648	1.00	34.31
	ATOM	5808	N	CYS	736	46.927	2.064	29.816	1.00	31.85
	ATOM	5810	CA	CYS	736	47.780	3.077	29.204	1.00	29.93
	ATOM	5811	CB	CYS	736	48.413	2.545	27.921	1.00	24.97
	ATOM	5812	SG	CYS	736	49.504	1.159	28.180	1.00	31.35
15	ATOM	5813	C	CYS	736	46.994	4.325	28.885	1.00	31.62
	ATOM	5814	O	CYS	736	47.562	5.416	28.823	1.00	30.73
	ATOM	5815	N	TRP	737	45.680	4.174	28.711	1.00	35.03
	ATOM	5817	CA	TRP	737	44.812	5.308	28.395	1.00	36.35
	ATOM	5818	CB	TRP	737	43.808	4.927	27.297	1.00	36.43
	ATOM	5819	CG	TRP	737	44.451	4.487	26.010	1.00	34.34
	ATOM	5820	CD2	TRP	737	43.914	3.565	25.052	1.00	34.81
	ATOM	5821	CE2	TRP	737	44.852	3.461	23.999	1.00	33.92
	ATOM	5822	CE3	TRP	737	42.730	2.816	24.980	1.00	33.06
20	ATOM	5823	CD1	TRP	737	45.659	4.890	25.514	1.00	35.19
	ATOM	5824	NE1	TRP	737	45.907	4.279	24.309	1.00	35.00
	ATOM	5826	CZ2	TRP	737	44.644	2.633	22.886	1.00	33.45
	ATOM	5827	CZ3	TRP	737	42.527	1.991	23.876	1.00	32.92
	ATOM	5828	CH2	TRP	737	43.480	1.909	22.844	1.00	30.45
	ATOM	5829	C	TRP	737	44.080	5.895	29.609	1.00	37.23
	ATOM	5830	O	TRP	737	43.047	6.551	29.474	1.00	37.44
	ATOM	5831	N	HIS	738	44.624	5.681	30.798	1.00	41.45
	ATOM	5833	CA	HIS	738	44.006	6.208	32.008	1.00	41.52
25	ATOM	5834	CB	HIS	738	44.675	5.635	33.258	1.00	41.23
	ATOM	5835	CG	HIS	738	43.925	5.924	34.522	1.00	43.31
	ATOM	5836	CD2	HIS	738	43.618	7.096	35.126	1.00	41.58
	ATOM	5837	ND1	HIS	738	43.338	4.935	35.279	1.00	44.22
	ATOM	5839	CE1	HIS	738	42.693	5.487	36.294	1.00	46.62
	ATOM	5840	NE2	HIS	738	42.848	6.798	36.223	1.00	43.99
	ATOM	5842	C	HIS	738	44.118	7.726	32.015	1.00	41.75
	ATOM	5843	O	HIS	738	45.179	8.268	31.731	1.00	40.84
	ATOM	5844	N	ALA	739	43.025	8.405	32.352	1.00	42.47
30	ATOM	5846	CA	ALA	739	43.004	9.873	32.398	1.00	44.58
	ATOM	5847	CB	ALA	739	41.629	10.361	32.825	1.00	48.19
	ATOM	5848	C	ALA	739	44.081	10.467	33.317	1.00	45.12
	ATOM	5849	O	ALA	739	44.653	11.510	33.020	1.00	45.66
	ATOM	5850	N	VAL	740	44.262	9.852	34.481	1.00	46.64
	ATOM	5852	CA	VAL	740	45.278	10.273	35.453	1.00	46.78
	ATOM	5853	CB	VAL	740	44.867	9.893	36.888	1.00	47.74
	ATOM	5854	CG1	VAL	740	45.919	10.372	37.890	1.00	49.35
	ATOM	5855	CG2	VAL	740	43.515	10.495	37.211	1.00	47.89
35	ATOM	5856	C	VAL	740	46.601	9.573	35.121	1.00	45.24
	ATOM	5857	O	VAL	740	46.754	8.362	35.347	1.00	45.01
	ATOM	5858	N	PRO	741	47.588	10.335	34.637	1.00	43.46
	ATOM	5859	CD	PRO	741	47.536	11.794	34.437	1.00	43.51
	ATOM	5860	CA	PRO	741	48.905	9.804	34.266	1.00	46.22

	ATOM	5861	CB	PRO	741	49.701	11.070	33.942	1.00	45.32
	ATOM	5862	CG	PRO	741	48.632	12.010	33.426	1.00	42.81
	ATOM	5863	C	PRO	741	49.588	8.936	35.328	1.00	47.45
	ATOM	5864	O	PRO	741	50.245	7.950	34.994	1.00	45.12
	ATOM	5865	N	SER	742	49.394	9.280	36.601	1.00	48.78
	ATOM	5867	CA	SER	742	49.994	8.532	37.703	1.00	48.76
	ATOM	5868	CB	SER	742	49.845	9.317	39.012	1.00	51.11
5	ATOM	5869	OG	SER	742	48.482	9.488	39.373	1.00	53.50
	ATOM	5871	C	SER	742	49.376	7.150	37.867	1.00	47.77
	ATOM	5872	O	SER	742	49.932	6.283	38.539	1.00	47.31
	ATOM	5873	N	GLN	743	48.199	6.962	37.284	1.00	47.57
	ATOM	5875	CA	GLN	743	47.511	5.689	37.384	1.00	47.14
	ATOM	5876	CB	GLN	743	46.004	5.918	37.531	1.00	50.16
	ATOM	5877	CG	GLN	743	45.438	5.447	38.671	1.00	54.69
	ATOM	5878	CD	GLN	743	46.239	5.964	40.051	1.00	57.62
	ATOM	5879	OE1	GLN	743	46.898	5.196	40.749	1.00	59.09
10	ATOM	5880	NE2	GLN	743	46.202	7.277	40.268	1.00	59.45
	ATOM	5883	C	GLN	743	47.816	4.774	36.212	1.00	44.41
	ATOM	5884	O	GLN	743	47.365	3.627	36.182	1.00	44.39
	ATOM	5885	N	ARG	744	48.515	5.305	35.212	1.00	42.87
	ATOM	5887	CA	ARG	744	48.902	4.506	34.046	1.00	41.45
	ATOM	5888	CB	ARG	744	49.350	5.397	32.883	1.00	37.34
	ATOM	5889	CG	ARG	744	48.316	6.380	32.412	1.00	32.30
	ATOM	5890	CD	ARG	744	48.854	7.207	31.270	1.00	31.37
	ATOM	5891	NE	ARG	744	47.921	8.276	30.946	1.00	36.76
15	ATOM	5893	CZ	ARG	744	48.271	9.492	30.543	1.00	39.88
	ATOM	5894	NH1	ARG	744	49.553	9.813	30.399	1.00	39.94
	ATOM	5897	NH2	ARG	744	47.330	10.404	30.322	1.00	39.12
	ATOM	5900	C	ARG	744	50.068	3.616	34.471	1.00	41.40
	ATOM	5901	O	ARG	744	50.813	3.945	35.405	1.00	42.84
	ATOM	5902	N	PRO	745	50.203	2.441	33.849	1.00	40.11
	ATOM	5903	CD	PRO	745	49.145	1.739	32.876	1.00	39.91
	ATOM	5904	CA	PRO	745	51.332	1.607	34.266	1.00	38.58
	ATOM	5905	CB	PRO	745	51.019	0.261	33.605	1.00	37.46
20	ATOM	5906	CG	PRO	745	50.250	0.645	32.377	1.00	37.41
	ATOM	5907	C	PRO	745	52.640	2.202	33.750	1.00	37.73
	ATOM	5908	O	PRO	745	52.634	3.027	32.835	1.00	37.71
	ATOM	5909	N	THR	746	53.753	1.843	34.373	1.00	35.90
	ATOM	5911	CA	THR	746	55.050	2.328	33.913	1.00	34.77
	ATOM	5912	CB	THR	746	56.085	2.380	35.075	1.00	33.85
	ATOM	5913	OG1	THR	746	56.296	1.059	35.602	1.00	33.92
	ATOM	5915	CG2	THR	746	55.605	3.302	36.177	1.00	32.17
	ATOM	5916	C	THR	746	55.544	1.327	32.870	1.00	32.69
25	ATOM	5917	O	THR	746	55.026	0.213	32.795	1.00	31.56
	ATOM	5918	N	PHE	747	56.538	1.708	32.066	1.00	34.04
	ATOM	5920	CA	PHE	747	57.093	0.782	31.083	1.00	31.74
	ATOM	5921	CB	PHE	747	58.121	1.472	30.193	1.00	30.55
	ATOM	5922	CG	PHE	747	57.504	2.287	29.096	1.00	29.40
	ATOM	5923	CD1	PHE	747	56.772	1.666	28.092	1.00	28.24
	ATOM	5924	CD2	PHE	747	57.609	3.667	29.091	1.00	27.50
	ATOM	5925	CE1	PHE	747	56.170	2.407	27.100	1.00	24.35
	ATOM	5926	CE2	PHE	747	57.001	4.413	28.091	1.00	29.27
30	ATOM	5927	CZ	PHE	747	56.276	3.776	27.103	1.00	25.73
	ATOM	5928	C	PHE	747	57.714	-0.413	31.782	1.00	31.92
	ATOM	5929	O	PHE	747	57.727	-1.514	31.243	1.00	32.46
	ATOM	5930	N	LYS	748	58.233	-0.199	32.986	1.00	33.47
	ATOM	5932	CA	LYS	748	58.816	-1.302	33.733	1.00	35.57
	ATOM	5933	CB	LYS	748	59.468	-0.800	35.026	1.00	39.42
	ATOM	5934	CG	LYS	748	60.083	-1.923	35.861	1.00	46.49
	ATOM	5935	CD	LYS	748	60.817	-1.407	37.103	1.00	50.69
	ATOM	5936	CE	LYS	748	61.253	-2.574	37.999	1.00	52.57
35	ATOM	5937	NZ	LYS	748	62.072	-2.129	39.155	1.00	56.45
	ATOM	5941	C	LYS	748	57.700	-2.318	34.028	1.00	35.58
	ATOM	5942	O	LYS	748	57.898	-3.526	33.871	1.00	34.72
	ATOM	5943	N	GLN	749	56.522	-1.818	34.411	1.00	35.59
	ATOM	5945	CA	GLN	749	55.369	-2.684	34.692	1.00	38.20

	ATOM	5946	CB	GLN	749	54.154	-1.872	35.162	1.00	42.73
	ATOM	5947	CG	GLN	749	54.264	-1.171	36.499	1.00	49.30
	ATOM	5948	CD	GLN	749	53.060	-0.282	36.761	1.00	53.13
	ATOM	5949	OE1	GLN	749	53.194	0.915	37.023	1.00	52.71
	ATOM	5950	NE2	GLN	749	51.873	-0.856	36.644	1.00	58.54
	ATOM	5953	C	GLN	749	54.954	-3.392	33.409	1.00	36.16
	ATOM	5954	O	GLN	749	54.745	-4.605	33.393	1.00	36.67
5	ATOM	5955	N	LEU	750	54.801	-2.609	32.342	1.00	35.83
	ATOM	5957	CA	LEU	750	54.381	-3.117	31.037	1.00	34.49
	ATOM	5958	CB	LEU	750	54.324	-1.988	30.004	1.00	32.49
	ATOM	5959	CG	LEU	750	53.206	-0.958	30.188	1.00	31.94
	ATOM	5960	CD1	LEU	750	53.411	0.230	29.267	1.00	30.45
	ATOM	5961	CD2	LEU	750	51.859	-1.610	29.933	1.00	29.30
	ATOM	5962	C	LEU	750	55.294	-4.214	30.559	1.00	33.87
	ATOM	5963	O	LEU	750	54.828	-5.208	30.027	1.00	34.72
	ATOM	5964	N	VAL	751	56.598	-4.038	30.759	1.00	36.12
10	ATOM	5966	CA	VAL	751	57.585	-5.045	30.363	1.00	34.50
	ATOM	5967	CB	VAL	751	59.054	-4.532	30.559	1.00	31.96
	ATOM	5968	CG1	VAL	751	60.052	-5.646	30.308	1.00	30.24
	ATOM	5969	CG2	VAL	751	59.342	-3.386	29.604	1.00	28.02
	ATOM	5970	C	VAL	751	57.349	-6.321	31.182	1.00	36.11
	ATOM	5971	O	VAL	751	57.333	-7.422	30.638	1.00	36.45
	ATOM	5972	N	GLU	752	57.107	-6.165	32.479	1.00	37.83
	ATOM	5974	CA	GLU	752	56.869	-7.326	33.331	1.00	41.47
	ATOM	5975	CB	GLU	752	56.800	-6.910	34.804	1.00	43.03
15	ATOM	5976	CG	GLU	752	58.122	-6.305	35.263	1.00	52.52
	ATOM	5977	CD	GLU	752	58.251	-6.176	36.761	1.00	57.18
	ATOM	5978	OE1	GLU	752	58.600	-5.068	37.233	1.00	58.11
	ATOM	5979	OE2	GLU	752	58.032	-7.191	37.461	1.00	61.59
	ATOM	5980	C	GLU	752	55.623	-8.097	32.890	1.00	40.16
	ATOM	5981	O	GLU	752	55.689	-9.308	32.642	1.00	39.75
	ATOM	5982	N	ASP	753	54.524	-7.376	32.696	1.00	40.06
	ATOM	5984	CA	ASP	753	53.275	-7.982	32.264	1.00	39.73
	ATOM	5985	CB	ASP	753	52.157	-6.947	32.247	1.00	41.00
20	ATOM	5986	CG	ASP	753	51.668	-6.591	33.640	1.00	45.17
	ATOM	5987	OD1	ASP	753	51.753	-7.468	34.543	1.00	49.78
	ATOM	5988	OD2	ASP	753	51.210	-5.439	33.829	1.00	45.51
	ATOM	5989	C	ASP	753	53.396	-8.595	30.890	1.00	39.64
	ATOM	5990	O	ASP	753	52.955	-9.720	30.674	1.00	41.84
	ATOM	5991	N	LEU	754	53.998	-7.861	29.960	1.00	37.75
	ATOM	5993	CA	LEU	754	54.161	-8.358	28.603	1.00	38.16
	ATOM	5994	CB	LEU	754	54.664	-7.261	27.664	1.00	36.95
	ATOM	5995	CG	LEU	754	53.552	-6.270	27.307	1.00	36.64
25	ATOM	5996	CD1	LEU	754	54.141	-5.062	26.590	1.00	34.02
	ATOM	5997	CD2	LEU	754	52.459	-6.968	26.465	1.00	34.13
	ATOM	5998	C	LEU	754	55.070	-9.561	28.571	1.00	38.46
	ATOM	5999	O	LEU	754	54.905	-10.451	27.740	1.00	39.95
	ATOM	6000	N	ASP	755	56.014	-9.602	29.502	1.00	39.19
	ATOM	6002	CA	ASP	755	56.930	-10.728	29.594	1.00	40.87
	ATOM	6003	CB	ASP	755	57.956	-10.462	30.696	1.00	45.11
	ATOM	6004	CG	ASP	755	59.128	-11.415	30.652	1.00	48.64
	ATOM	6005	OD1	ASP	755	59.759	-11.612	31.711	1.00	54.27
30	ATOM	6006	OD2	ASP	755	59.432	-11.954	29.565	1.00	51.46
	ATOM	6007	C	ASP	755	56.082	-11.952	29.947	1.00	40.67
	ATOM	6008	O	ASP	755	56.152	-12.996	29.289	1.00	38.49
	ATOM	6009	N	ARG	756	55.232	-11.771	30.955	1.00	40.06
	ATOM	6011	CA	ARG	756	54.340	-12.817	31.437	1.00	40.07
	ATOM	6012	CB	ARG	756	53.573	-12.316	32.661	1.00	40.24
	ATOM	6013	CG	ARG	756	52.435	-13.217	33.138	1.00	42.12
	ATOM	6014	CD	ARG	756	51.791	-12.631	34.389	1.00	42.33
	ATOM	6015	NE	ARG	756	51.353	-11.247	34.186	1.00	46.68
35	ATOM	6017	CZ	ARG	756	50.295	-10.891	33.460	1.00	48.17
	ATOM	6018	NH1	ARG	756	49.549	-11.818	32.866	1.00	46.64
	ATOM	6021	NH2	ARG	756	49.998	-9.605	33.305	1.00	48.92
	ATOM	6024	C	ARG	756	53.362	-13.275	30.364	1.00	40.19
	ATOM	6025	O	ARG	756	53.247	-14.469	30.110	1.00	42.24

	ATOM	6026	N	ILE	757	52.688	-12.327	29.717	1.00	38.18	
	ATOM	6028	CA	ILE	757	51.706	-12.649	28.683	1.00	38.40	
	ATOM	6029	CB	ILE	757	50.952	-11.382	28.187	1.00	36.55	
	ATOM	6030	CG2	ILE	757	49.952	-11.758	27.105	1.00	34.67	
	ATOM	6031	CG1	ILE	757	50.216	-10.726	29.364	1.00	34.65	
	ATOM	6032	CD1	ILE	757	49.554	-9.423	29.048	1.00	36.49	
	ATOM	6033	C	ILE	757	52.301	-13.400	27.500	1.00	39.19	
5	ATOM	6034	O	ILE	757	51.709	-14.360	27.025	1.00	39.66	
	ATOM	6035	N	VAL	758	53.492	-12.996	27.061	1.00	42.36	
	ATOM	6037	CA	VAL	758	54.161	-13.645	25.937	1.00	43.15	
	ATOM	6038	CB	VAL	758	55.582	-13.052	25.682	1.00	41.72	
	ATOM	6039	CG1	VAL	758	56.308	-13.855	24.621	1.00	41.57	
	ATOM	6040	CG2	VAL	758	55.491	-11.619	25.229	1.00	40.06	
	ATOM	6041	C	VAL	758	54.299	-15.133	26.231	1.00	47.11	
	ATOM	6042	O	VAL	758	54.045	-15.971	25.369	1.00	48.62	
10	ATOM	6043	N	ALA	759	54.695	-15.446	27.464	1.00	49.64	
	ATOM	6045	CA	ALA	759	54.879	-16.820	27.908	1.00	51.35	
	ATOM	6046	CB	ALA	759	55.423	-16.830	29.317	1.00	50.11	
	ATOM	6047	C	ALA	759	53.568	-17.598	27.850	1.00	54.72	
	ATOM	6048	O	ALA	759	53.520	-18.717	27.348	1.00	58.64	
	ATOM	6049	N	LEU	760	52.496	-16.983	28.329	1.00	54.84	
	ATOM	6051	CA	LEU	760	51.194	-17.628	28.343	1.00	55.87	
	ATOM	6052	CB	LEU	760	50.330	-17.034	29.459	1.00	56.85	
	ATOM	6053	CG	LEU	760	50.875	-17.165	30.885	1.00	56.80	
15	ATOM	6054	CD1	LEU	760	49.991	-16.392	31.849	1.00	56.78	
	ATOM	6055	CD2	LEU	760	50.959	-18.631	31.289	1.00	57.78	
	ATOM	6056	C	LEU	760	50.454	-17.546	27.013	1.00	57.36	
	ATOM	6057	O	LEU	760	49.262	-17.859	26.944	1.00	57.65	
	ATOM	6058	N	THR	761	51.151	-17.134	25.956	1.00	58.71	
	ATOM	6060	CA	THR	761	50.541	-17.025	24.630	1.00	59.04	
	ATOM	6061	CB	THR	761	50.839	-15.657	23.971	1.00	56.72	
	ATOM	6062	OG1	THR	761	50.287	-14.610	24.775	1.00	56.53	
	ATOM	6064	CG2	THR	761	50.213	-15.584	22.590	1.00	53.81	
	ATOM	6065	C	THR	761	51.049	-18.138	23.721	1.00	60.44	
20	ATOM	6066	O	THR	761	52.255	-18.295	23.530	1.00	61.40	
	ATOM	6067	SG	CYS	1603	18.474	-8.976	20.202	0.50	37.82	PRT2
	ATOM	6068	CG	MET	534	69.311	12.109	23.281	0.50	36.25	PRT2
	ATOM	6069	SD	MET	534	69.286	12.958	24.867	0.50	42.66	PRT2
	ATOM	6070	CE	MET	534	70.539	12.083	25.804	0.50	43.27	PRT2
	ATOM	6071	SG	CYS	603	56.046	-7.949	16.446	0.50	36.47	PRT2
	ATOM	2676	OH2	TIP3	1	71.794	25.061	2.660	1.00	24.53	
	ATOM	2679	OH2	TIP3	2	39.750	3.992	15.898	1.00	39.62	
25	ATOM	2682	OH2	TIP3	3	83.809	19.717	10.596	1.00	28.26	
	ATOM	2685	OH2	TIP3	4	83.630	20.056	7.685	1.00	26.19	
	ATOM	2688	OH2	TIP3	5	75.073	16.616	6.785	1.00	26.48	
	ATOM	2691	OH2	TIP3	6	86.549	19.594	9.502	1.00	33.65	
	ATOM	2694	OH2	TIP3	7	51.913	11.060	24.263	1.00	35.55	
	ATOM	2697	OH2	TIP3	8	55.093	9.421	22.524	1.00	26.63	
	ATOM	2700	OH2	TIP3	9	57.161	4.614	32.443	1.00	29.69	
	ATOM	2703	OH2	TIP3	10	52.169	4.735	13.281	1.00	22.61	
	ATOM	2706	OH2	TIP3	11	41.110	5.543	22.764	1.00	41.60	
30	ATOM	2709	OH2	TIP3	12	45.145	8.857	21.555	1.00	36.99	
	ATOM	2712	OH2	TIP3	13	64.465	-2.607	28.883	1.00	30.17	
	ATOM	2715	OH2	TIP3	14	76.944	13.287	23.954	1.00	32.94	
	ATOM	2718	OH2	TIP3	15	79.062	17.048	18.200	1.00	51.65	
	ATOM	2721	OH2	TIP3	16	83.066	11.657	15.958	1.00	25.12	
	ATOM	2724	OH2	TIP3	17	13.957	-9.951	0.095	1.00	26.02	
	ATOM	2727	OH2	TIP3	18	38.359	-0.001	5.000	1.00	37.43	
	ATOM	2730	OH2	TIP3	19	5.442	2.705	19.077	1.00	29.46	
	ATOM	2733	OH2	TIP3	20	27.008	6.166	4.885	1.00	25.05	
	ATOM	2736	OH2	TIP3	21	34.242	-1.725	16.911	1.00	52.12	
35	ATOM	2739	OH2	TIP3	22	20.167	2.428	27.681	1.00	42.69	
	ATOM	2742	OH2	TIP3	23	50.794	-11.834	38.045	1.00	60.16	
	ATOM	2745	OH2	TIP3	24	17.261	-5.993	-1.757	1.00	25.88	
	ATOM	2748	OH2	TIP3	25	27.516	7.803	15.070	1.00	39.33	
	ATOM	2751	OH2	TIP3	26	31.574	0.146	6.684	1.00	35.78	

	ATOM	2754	OH2	TIP3	27	27.119	-12.972	27.844	1.00	43.66
	ATOM	2757	OH2	TIP3	28	28.439	-17.074	13.203	1.00	36.44
	ATOM	2760	OH2	TIP3	29	88.706	14.393	7.969	1.00	32.49
	ATOM	2763	OH2	TIP3	30	-2.338	-3.424	11.295	1.00	49.20
	ATOM	2766	OH2	TIP3	31	35.086	-4.130	18.836	1.00	37.83
	ATOM	2769	OH2	TIP3	32	80.455	17.922	9.507	1.00	23.69
	ATOM	2772	OH2	TIP3	33	5.538	3.619	10.835	1.00	29.13
5	ATOM	2775	OH2	TIP3	34	-10.685	5.290	11.288	1.00	24.40
	ATOM	2778	OH2	TIP3	35	29.210	-8.799	20.241	1.00	46.52
	ATOM	2781	OH2	TIP3	36	6.195	3.150	13.803	1.00	31.39
	ATOM	2784	OH2	TIP3	37	31.898	2.830	0.154	1.00	40.17
	ATOM	2787	OH2	TIP3	38	19.915	2.023	-3.939	1.00	41.34
	ATOM	2790	OH2	TIP3	39	62.242	2.604	32.859	1.00	39.67
	ATOM	2793	OH2	TIP3	40	21.231	-7.063	-3.900	1.00	23.55
	ATOM	2796	OH2	TIP3	41	-15.809	8.838	22.610	1.00	36.02
	ATOM	2799	OH2	TIP3	42	40.120	2.154	8.433	1.00	60.62
10	ATOM	2802	OH2	TIP3	43	19.583	11.128	-0.045	1.00	37.85
	ATOM	2805	OH2	TIP3	44	67.056	9.030	17.389	1.00	29.79
	ATOM	2808	OH2	TIP3	45	87.772	18.919	18.595	1.00	48.44
	ATOM	2811	OH2	TIP3	46	74.584	17.123	4.200	1.00	39.18
	ATOM	2814	OH2	TIP3	47	29.365	16.707	10.560	1.00	34.11
	ATOM	2817	OH2	TIP3	48	66.486	6.826	15.051	1.00	32.28
	ATOM	2820	OH2	TIP3	49	85.008	21.441	5.731	1.00	23.97
	ATOM	2823	OH2	TIP3	50	-4.572	2.912	3.173	1.00	28.05
	ATOM	2826	OH2	TIP3	51	19.496	5.141	4.881	1.00	28.88
15	ATOM	2829	OH2	TIP3	52	67.492	3.490	10.902	1.00	33.57
	ATOM	2832	OH2	TIP3	53	34.791	5.413	24.797	1.00	40.16
	ATOM	2835	OH2	TIP3	54	34.787	-16.910	13.756	1.00	39.46
	ATOM	2838	OH2	TIP3	55	59.972	7.450	27.870	1.00	31.56
	ATOM	2841	OH2	TIP3	56	-7.139	-1.696	6.345	1.00	42.00
	ATOM	2844	OH2	TIP3	57	54.998	11.953	25.360	1.00	42.05
	ATOM	2847	OH2	TIP3	58	68.697	6.686	16.740	1.00	46.12
	ATOM	2850	OH2	TIP3	59	73.750	20.885	19.041	1.00	32.26
	ATOM	2853	OH2	TIP3	60	3.431	-8.270	-8.218	1.00	31.22
20	ATOM	2856	OH2	TIP3	61	37.904	10.790	5.612	1.00	33.72
	ATOM	2859	OH2	TIP3	62	29.982	-9.545	-1.303	1.00	39.11
	ATOM	2862	OH2	TIP3	63	66.918	1.757	8.678	1.00	34.68
	ATOM	2865	OH2	TIP3	64	49.117	1.310	12.227	1.00	34.31
	ATOM	2868	OH2	TIP3	65	41.246	3.987	29.033	1.00	34.55
	ATOM	2871	OH2	TIP3	66	10.755	-12.957	1.167	1.00	42.14
	ATOM	2874	OH2	TIP3	67	-1.184	-4.327	21.439	1.00	37.90
	ATOM	2877	OH2	TIP3	68	30.349	16.267	13.265	1.00	55.23
25	ATOM	2880	OH2	TIP3	69	8.111	4.362	3.445	1.00	23.88
	ATOM	2883	OH2	TIP3	70	73.131	18.780	22.628	1.00	40.20
	ATOM	2886	OH2	TIP3	71	-7.949	-3.409	24.953	1.00	35.49
	ATOM	2889	OH2	TIP3	72	66.379	-4.621	28.423	1.00	45.46
	ATOM	2892	OH2	TIP3	73	21.506	-20.711	4.815	1.00	52.46
	ATOM	2895	OH2	TIP3	74	59.539	-6.865	4.928	1.00	48.87
	ATOM	2898	OH2	TIP3	75	16.565	-13.297	-3.008	1.00	51.80
	ATOM	2901	OH2	TIP3	76	-15.235	7.385	4.428	1.00	29.13
	ATOM	2904	OH2	TIP3	77	32.926	2.785	13.213	1.00	37.62
	ATOM	2907	OH2	TIP3	78	0.246	-2.768	10.996	1.00	28.25
30	ATOM	2910	OH2	TIP3	79	17.495	2.354	5.447	1.00	23.63
	ATOM	2913	OH2	TIP3	80	6.336	2.434	21.950	1.00	29.56
	ATOM	2916	OH2	TIP3	81	27.374	3.628	6.163	1.00	34.06
	ATOM	2919	OH2	TIP3	82	-8.708	6.263	9.522	1.00	30.34
	ATOM	2922	OH2	TIP3	83	1.500	-1.935	8.721	1.00	27.61
	ATOM	2925	OH2	TIP3	84	-4.825	-3.133	6.984	1.00	33.50
	ATOM	2928	OH2	TIP3	85	17.513	2.839	1.966	1.00	24.27
	ATOM	2931	OH2	TIP3	86	20.298	3.414	2.920	1.00	26.15
	ATOM	2934	OH2	TIP3	87	0.488	-2.158	22.213	1.00	25.95
35	ATOM	2937	OH2	TIP3	88	19.939	-6.185	-1.553	1.00	19.14
	ATOM	2940	OH2	TIP3	89	10.670	-15.654	6.839	1.00	33.36
	ATOM	2943	OH2	TIP3	90	4.107	-12.003	11.805	1.00	33.92
	ATOM	2946	OH2	TIP3	91	6.238	0.927	-3.342	1.00	23.31
	ATOM	2949	OH2	TIP3	92	-13.563	1.438	5.472	1.00	27.86

	ATOM	2952	OH2	TIP3	93	15.707	-7.454	0.106	1.00	26.69
	ATOM	2955	OH2	TIP3	94	-1.856	-5.393	3.795	1.00	39.91
	ATOM	2958	OH2	TIP3	95	12.654	4.928	-4.474	1.00	31.32
	ATOM	2961	OH2	TIP3	96	69.774	27.363	2.127	1.00	35.86
	ATOM	2964	OH2	TIP3	97	24.636	-13.192	0.040	1.00	48.53
	ATOM	2967	OH2	TIP3	98	60.453	-4.625	33.829	1.00	31.97
	ATOM	2970	OH2	TIP3	99	10.513	5.719	3.487	1.00	38.90
5	ATOM	2973	OH2	TIP3	100	-9.499	-4.011	4.342	1.00	30.61
	ATOM	2976	OH2	TIP3	101	73.056	-1.608	10.514	1.00	36.08
	ATOM	2979	OH2	TIP3	102	-3.152	5.709	30.608	1.00	29.38
	ATOM	2982	OH2	TIP3	103	36.630	0.702	11.792	1.00	47.80
	ATOM	2985	OH2	TIP3	104	21.475	6.325	16.924	1.00	24.03
	ATOM	2988	OH2	TIP3	105	31.272	0.656	19.432	1.00	53.74
	ATOM	2991	OH2	TIP3	106	5.620	-8.417	22.266	1.00	51.90
	ATOM	2994	OH2	TIP3	107	-13.144	8.294	17.464	1.00	35.23
	ATOM	2997	OH2	TIP3	108	26.680	-10.556	-1.042	1.00	27.83
10	ATOM	3000	OH2	TIP3	109	24.149	1.846	18.172	1.00	30.90
	ATOM	3003	OH2	TIP3	110	-1.943	12.643	3.558	1.00	33.82
	ATOM	3006	OH2	TIP3	111	59.560	13.617	33.196	1.00	54.79
	ATOM	3009	OH2	TIP3	112	4.351	-10.740	1.991	1.00	37.96
	ATOM	3012	OH2	TIP3	113	8.396	2.913	0.958	1.00	29.64
	ATOM	3015	OH2	TIP3	114	75.905	1.753	25.812	1.00	38.73
	ATOM	3018	OH2	TIP3	115	48.783	15.535	14.189	1.00	35.24
	ATOM	3021	OH2	TIP3	116	2.419	-11.312	9.146	1.00	32.85
	ATOM	3024	OH2	TIP3	117	83.014	26.360	12.964	1.00	41.83
15	ATOM	3027	OH2	TIP3	118	8.761	-6.579	-3.252	1.00	42.78
	ATOM	3030	OH2	TIP3	119	-8.417	4.493	4.305	1.00	28.32
	ATOM	3033	OH2	TIP3	120	7.908	-13.690	8.639	1.00	33.73
	ATOM	3036	OH2	TIP3	121	51.437	6.329	10.373	1.00	31.72
	ATOM	3039	OH2	TIP3	122	20.660	3.686	15.591	1.00	32.37
	ATOM	3042	OH2	TIP3	123	73.039	3.790	20.450	1.00	35.80
	ATOM	3045	OH2	TIP3	124	5.155	-11.467	22.590	1.00	45.12
	ATOM	3048	OH2	TIP3	125	34.172	2.412	16.576	1.00	41.90
	ATOM	3051	OH2	TIP3	126	9.597	-11.905	7.083	1.00	24.83
20	ATOM	3054	OH2	TIP3	127	8.276	3.860	-1.622	1.00	35.46
	ATOM	3057	OH2	TIP3	128	66.282	5.755	12.352	1.00	35.43
	ATOM	3060	OH2	TIP3	129	7.377	6.932	2.982	1.00	40.68
	ATOM	3063	OH2	TIP3	130	35.832	-1.778	0.201	1.00	34.99
	ATOM	3066	OH2	TIP3	131	44.781	10.362	11.064	1.00	42.31
	ATOM	3069	OH2	TIP3	132	27.790	-12.638	18.958	1.00	58.71
	ATOM	3072	OH2	TIP3	133	45.221	11.540	21.428	1.00	36.75
	ATOM	3075	OH2	TIP3	134	57.560	-10.846	14.099	1.00	52.90
	ATOM	3078	OH2	TIP3	135	-3.354	15.001	16.515	1.00	37.81
25	ATOM	3081	OH2	TIP3	136	85.717	11.251	9.062	1.00	35.18
	ATOM	3084	OH2	TIP3	137	12.951	-2.469	2.075	1.00	22.07
	ATOM	3087	OH2	TIP3	138	75.645	3.486	20.527	1.00	38.01
	ATOM	3090	OH2	TIP3	139	13.237	7.412	-2.649	1.00	33.50
	ATOM	3093	OH2	TIP3	140	11.262	-9.970	0.974	1.00	26.14
	ATOM	3096	OH2	TIP3	141	59.480	10.772	14.098	1.00	52.08
	ATOM	3099	OH2	TIP3	142	13.869	-16.121	3.919	1.00	40.06
	ATOM	3102	OH2	TIP3	143	-6.407	-3.413	16.641	1.00	44.38
	ATOM	3105	OH2	TIP3	144	25.667	-12.645	3.411	1.00	48.28
30	ATOM	3108	OH2	TIP3	145	-16.282	10.641	6.423	1.00	40.94
	ATOM	3111	OH2	TIP3	146	86.637	12.861	7.008	1.00	39.45
	ATOM	3114	OH2	TIP3	147	32.082	-4.569	1.892	1.00	27.35
	ATOM	3117	OH2	TIP3	148	44.809	7.627	11.670	1.00	35.65
	ATOM	3120	OH2	TIP3	149	80.693	12.459	16.523	1.00	37.21
	ATOM	3123	OH2	TIP3	150	2.941	-7.118	-1.805	1.00	38.43
	ATOM	3126	OH2	TIP3	151	31.794	-6.086	20.704	1.00	42.80
	ATOM	3129	OH2	TIP3	152	74.770	-2.683	12.398	1.00	40.40
	ATOM	3132	OH2	TIP3	153	7.731	6.640	-1.037	1.00	35.61
35	ATOM	3135	OH2	TIP3	154	71.617	5.599	21.838	1.00	40.14
	ATOM	3138	OH2	TIP3	155	68.113	-4.968	8.886	1.00	34.38
	ATOM	3141	OH2	TIP3	156	0.042	-9.364	7.055	1.00	33.08
	ATOM	3144	OH2	TIP3	157	68.020	18.352	10.995	1.00	34.76
	ATOM	3147	OH2	TIP3	158	3.795	8.550	4.533	1.00	34.69

	ATOM	3150	OH2	TIP3	159	52.106	11.746	18.410	1.00	40.06
	ATOM	3153	OH2	TIP3	160	6.414	3.927	16.889	1.00	37.07
	ATOM	3156	OH2	TIP3	161	-10.282	6.603	4.715	1.00	38.48
	ATOM	3159	OH2	TIP3	162	76.410	1.681	-0.781	1.00	42.87
	ATOM	3162	OH2	TIP3	163	9.910	-12.046	17.157	1.00	32.79
	ATOM	3165	OH2	TIP3	164	33.983	14.219	18.191	1.00	37.35
	ATOM	3168	OH2	TIP3	165	2.330	-7.952	16.978	1.00	44.25
5	ATOM	3171	OH2	TIP3	166	29.701	1.780	5.987	1.00	39.86
	ATOM	3174	OH2	TIP3	167	32.494	-17.319	11.798	1.00	38.46
	ATOM	3177	OH2	TIP3	168	42.107	17.932	10.978	1.00	44.83
	ATOM	3180	OH2	TIP3	169	87.822	10.537	5.568	1.00	54.30
	ATOM	3183	OH2	TIP3	170	70.261	-4.143	25.064	1.00	44.75
	ATOM	3186	OH2	TIP3	171	77.519	5.882	22.891	1.00	42.67
	ATOM	3189	OH2	TIP3	172	-0.921	-8.166	4.521	1.00	45.91
	ATOM	3192	OH2	TIP3	173	34.213	15.329	1.478	1.00	40.10
	ATOM	3195	OH2	TIP3	174	-9.647	7.731	7.383	1.00	35.63
10	ATOM	3198	OH2	TIP3	175	11.619	5.799	7.440	1.00	36.36
	ATOM	3201	OH2	TIP3	176	-8.709	13.964	13.507	1.00	51.97
	ATOM	3204	OH2	TIP3	177	31.770	3.376	18.354	1.00	46.26
	ATOM	3207	OH2	TIP3	178	-8.494	9.789	24.269	1.00	50.98
	ATOM	3210	OH2	TIP3	179	-1.234	-6.253	15.622	1.00	38.47
	ATOM	3213	OH2	TIP3	180	80.252	0.887	15.691	1.00	39.48
	ATOM	3216	OH2	TIP3	181	67.248	20.272	-1.555	1.00	48.22
	ATOM	3219	OH2	TIP3	182	-0.566	4.367	1.362	1.00	39.84
	ATOM	3222	OH2	TIP3	183	0.120	6.523	2.615	1.00	33.11
15	ATOM	3225	OH2	TIP3	184	-1.496	8.789	1.237	1.00	41.03
	ATOM	3228	OH2	TIP3	185	-5.143	9.130	2.236	1.00	40.47
	ATOM	3231	OH2	TIP3	186	-7.275	10.106	3.833	1.00	40.55
	ATOM	3234	OH2	TIP3	187	2.717	7.275	0.769	1.00	44.67
	ATOM	3237	OH2	TIP3	188	5.176	10.645	8.459	1.00	34.48
	ATOM	3240	OH2	TIP3	189	63.822	12.690	22.883	1.00	41.88
	ATOM	3243	OH2	TIP3	190	79.109	1.028	18.201	1.00	46.40
	ATOM	3246	OH2	TIP3	191	59.332	-11.681	7.236	1.00	63.45
	ATOM	3249	OH2	TIP3	192	13.967	-1.218	-4.268	1.00	34.79
20	ATOM	3252	OH2	TIP3	193	59.444	2.867	33.368	1.00	41.00
	ATOM	3255	OH2	TIP3	194	32.024	13.487	19.852	1.00	53.61
	ATOM	3258	OH2	TIP3	195	72.101	16.218	22.802	1.00	44.03
	ATOM	3261	OH2	TIP3	196	0.987	-8.546	14.474	1.00	41.38
	ATOM	3264	OH2	TIP3	197	-0.491	5.461	30.372	1.00	38.51
	ATOM	3267	OH2	TIP3	198	61.179	6.795	11.905	1.00	41.77
	ATOM	3270	OH2	TIP3	199	-1.365	-4.128	27.656	1.00	50.98
	ATOM	3273	OH2	TIP3	200	81.440	15.558	17.262	1.00	44.47
	ATOM	3276	OH2	TIP3	201	-17.491	4.116	23.873	1.00	50.58
25	ATOM	3279	OH2	TIP3	202	27.546	10.513	14.499	1.00	39.06
	ATOM	3282	OH2	TIP3	203	34.992	4.513	27.719	1.00	49.89
	ATOM	3285	OH2	TIP3	204	-3.486	-4.591	9.171	1.00	49.53
	ATOM	3288	OH2	TIP3	205	42.799	7.848	22.320	1.00	43.50
	ATOM	3291	OH2	TIP3	206	52.728	11.884	21.811	1.00	39.98
	ATOM	3294	OH2	TIP3	207	26.706	14.069	19.833	1.00	46.68
	ATOM	3297	OH2	TIP3	208	-7.154	8.907	6.444	1.00	42.83
	ATOM	3300	OH2	TIP3	209	86.648	5.606	16.034	1.00	51.15
	ATOM	3303	OH2	TIP3	210	54.879	15.840	20.379	1.00	50.23
30	ATOM	3306	OH2	TIP3	211	51.417	19.473	22.691	1.00	48.35
	ATOM	3309	OH2	TIP3	212	20.102	6.924	7.085	1.00	38.15
	ATOM	3312	OH2	TIP3	213	28.991	1.941	-3.570	1.00	47.39
	ATOM	3315	OH2	TIP3	214	26.505	2.386	-4.633	1.00	46.48
	ATOM	3318	OH2	TIP3	215	36.482	2.810	18.521	1.00	46.26
	ATOM	3321	OH2	TIP3	216	16.941	-20.504	14.128	1.00	49.74
	ATOM	3324	OH2	TIP3	217	28.572	-14.448	6.157	1.00	49.13
	ATOM	3327	OH2	TIP3	218	31.380	1.471	-1.998	1.00	43.02
	ATOM	3330	OH2	TIP3	219	10.065	-16.338	15.455	1.00	42.75
35	ATOM	3333	OH2	TIP3	220	7.350	-11.974	5.652	1.00	55.35
	ATOM	3336	OH2	TIP3	221	-12.328	14.547	10.986	1.00	51.29
	ATOM	3339	OH2	TIP3	222	11.186	9.609	-1.388	1.00	37.68
	ATOM	3342	OH2	TIP3	223	11.389	12.276	-1.400	1.00	46.93
	ATOM	3345	OH2	TIP3	224	34.202	13.069	-1.161	1.00	41.79

	ATOM	3348	OH2	TIP3	225	31.303	17.822	7.853	1.00	48.21
	ATOM	3351	OH2	TIP3	226	36.875	11.804	-2.106	1.00	59.03
	ATOM	3354	OH2	TIP3	227	35.134	3.048	11.020	1.00	50.41
	ATOM	3357	OH2	TIP3	228	63.950	13.409	26.627	1.00	43.40
	ATOM	3360	OH2	TIP3	229	36.367	6.116	15.221	1.00	57.79
	ATOM	3363	OH2	TIP3	230	90.606	4.355	6.342	1.00	47.53
5	ATOM	3366	OH2	TIP3	231	50.038	-11.673	10.767	1.00	56.90
	ATOM	3369	OH2	TIP3	232	60.196	-10.144	16.590	1.00	51.61
	ATOM	3372	OH2	TIP3	233	18.021	-21.179	7.008	1.00	49.93
	ATOM	3375	OH2	TIP3	234	66.236	-1.218	30.583	1.00	39.55
	ATOM	3378	OH2	TIP3	235	74.959	18.928	20.659	1.00	38.04
	ATOM	3381	OH2	TIP3	236	-2.816	10.082	3.187	1.00	49.31
	ATOM	3384	OH2	TIP3	237	5.894	-3.410	25.289	1.00	35.55
	ATOM	3387	OH2	TIP3	238	35.784	6.047	12.543	1.00	41.96
	ATOM	3390	OH2	TIP3	239	-5.400	16.537	14.180	1.00	43.13
10	ATOM	3393	OH2	TIP3	240	46.589	-11.622	26.970	1.00	43.71
	ATOM	3396	OH2	TIP3	241	6.199	6.592	13.797	1.00	46.51
	ATOM	3399	OH2	TIP3	242	-3.777	-5.158	20.907	1.00	42.08
	ATOM	3402	OH2	TIP3	243	1.969	-3.711	-0.282	1.00	37.38
	ATOM	3405	OH2	TIP3	244	86.200	11.629	22.877	1.00	56.51
	ATOM	3408	OH2	TIP3	245	10.557	7.565	5.514	1.00	47.58
	ATOM	3411	OH2	TIP3	246	4.802	8.149	2.136	1.00	50.70
	ATOM	3414	OH2	TIP3	247	64.590	-8.128	20.596	1.00	43.65
	ATOM	3417	OH2	TIP3	248	11.346	-17.840	13.283	1.00	47.64
15	ATOM	3420	OH2	TIP3	249	42.116	-6.808	14.953	1.00	53.79
	ATOM	3423	OH2	TIP3	250	2.745	-4.054	22.128	1.00	60.88
	ATOM	3426	OH2	TIP3	251	71.999	1.177	-2.124	1.00	47.90
	ATOM	3429	OH2	TIP3	252	50.328	-3.210	33.068	1.00	57.01
	ATOM	3435	OH2	TIP3	253	57.838	9.337	11.631	1.00	52.55
	ATOM	3438	OH2	TIP3	254	43.373	20.489	30.490	1.00	51.97
	ATOM	3441	OH2	TIP3	255	67.045	16.529	15.793	1.00	49.02
	ATOM	3444	OH2	TIP3	256	87.509	21.566	5.114	1.00	54.21
	ATOM	3447	OH2	TIP3	257	21.060	10.052	-9.215	1.00	60.32
20	ATOM	3450	OH2	TIP3	258	11.827	2.450	27.951	1.00	54.26
	ATOM	3453	OH2	TIP3	259	64.788	-0.418	3.563	1.00	50.94
	ATOM	3456	OH2	TIP3	260	71.859	28.473	7.950	1.00	62.81
	ATOM	3459	OH2	TIP3	261	25.605	-8.106	27.287	1.00	52.81
	ATOM	3462	OH2	TIP3	262	-18.804	10.886	12.628	1.00	55.25
	ATOM	3465	OH2	TIP3	263	30.652	11.349	16.201	1.00	50.40
	ATOM	3468	OH2	TIP3	264	22.350	-16.098	-2.742	1.00	53.27
	ATOM	3471	OH2	TIP3	265	29.720	9.106	18.465	1.00	57.23

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Table 4: Atomic Structure Coordinates of Unphosphorylated
FLGK:AMP-PCP Co-Complex

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	Atom No.	Atom Type	A.A. Type	A.A. No.	X	Y	Z	OCC	B
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10	ATOM 1	N	GLU	1464	-13.425	16.769	8.973	1.00	61.21
	ATOM 3	CA	GLU	1464	-12.536	16.852	7.821	1.00	59.70
	ATOM 4	CB	GLU	1464	-11.383	17.829	8.085	1.00	60.05
	ATOM 5	C	GLU	1464	-11.998	15.478	7.427	1.00	57.11
	ATOM 6	O	GLU	1464	-12.134	15.076	6.274	1.00	59.75
	ATOM 7	N	LEU	1465	-11.406	14.749	8.368	1.00	52.21
	ATOM 9	CA	LEU	1465	-10.871	13.424	8.062	1.00	46.72
	ATOM 10	CB	LEU	1465	-10.102	12.844	9.249	1.00	44.98
	ATOM 11	CG	LEU	1465	-8.608	13.123	9.384	1.00	46.11
	ATOM 12	CD1	LEU	1465	-8.338	14.592	9.663	1.00	51.13
15	ATOM 13	CD2	LEU	1465	-8.064	12.286	10.512	1.00	4.99
	ATOM 14	C	LEU	1465	-12.000	12.475	7.700	1.00	44.16
	ATOM 15	O	LEU	1465	-13.101	12.577	8.239	1.00	44.04
	ATOM 16	N	PRO	1466	-11.760	11.580	6.732	1.00	42.53
	ATOM 17	CD	PRO	1466	-10.535	11.534	5.913	1.00	41.30
	ATOM 18	CA	PRO	1466	-12.740	10.591	6.269	1.00	41.16
	ATOM 19	CB	PRO	1466	-12.134	10.111	4.959	1.00	41.48
	ATOM 20	CG	PRO	1466	-10.658	10.213	5.220	1.00	41.30
	ATOM 21	C	PRO	1466	-12.906	9.441	7.261	1.00	41.31
	ATOM 22	O	PRO	1466	-11.929	8.936	7.816	1.00	41.05
20	ATOM 23	N	GLU	1467	-14.145	9.044	7.500	1.00	41.02
	ATOM 25	CA	GLU	1467	-14.428	7.960	8.427	1.00	42.42
	ATOM 26	CB	GLU	1467	-15.931	7.904	8.712	1.00	47.98
	ATOM 27	CG	GLU	1467	-16.565	9.238	9.105	1.00	52.79
	ATOM 28	CD	GLU	1467	-17.998	9.093	9.606	1.00	54.21
	ATOM 29	OE1	GLU	1467	-18.474	7.949	9.741	1.00	58.90
	ATOM 30	OE2	GLU	1467	-18.650	10.120	9.879	1.00	55.90
	ATOM 31	C	GLU	1467	-13.972	6.628	7.837	1.00	40.93
	ATOM 32	O	GLU	1467	-14.061	6.426	6.620	1.00	44.32
	ATOM 33	N	ASP	1468	-13.473	5.731	8.689	1.00	35.10
25	ATOM 35	CA	ASP	1468	-13.024	4.404	8.256	1.00	31.82
	ATOM 36	CB	ASP	1468	-11.507	4.358	7.992	1.00	30.65
	ATOM 37	CG	ASP	1468	-11.025	3.002	7.440	1.00	29.93
	ATOM 38	OD1	ASP	1468	-11.689	1.958	7.603	1.00	29.63
	ATOM 39	OD2	ASP	1468	-9.945	2.974	6.835	1.00	33.63
	ATOM 40	C	ASP	1468	-13.394	3.441	9.369	1.00	31.81
	ATOM 41	O	ASP	1468	-12.618	3.209	10.302	1.00	31.91
	ATOM 42	N	PRO	1469	-14.569	2.819	9.247	1.00	29.68
	ATOM 43	CD	PRO	1469	-15.482	2.963	8.097	1.00	28.33
	ATOM 44	CA	PRO	1469	-15.100	1.863	10.220	1.00	31.80
30	ATOM 45	CB	PRO	1469	-16.352	1.331	9.510	1.00	32.51
	ATOM 46	CG	PRO	1469	-16.783	2.496	8.656	1.00	27.41
	ATOM 47	C	PRO	1469	-14.146	0.731	10.590	1.00	30.44
	ATOM 48	O	PRO	1469	-14.272	0.135	11.654	1.00	30.02
	ATOM 49	N	ARG	1470	-13.198	0.442	9.704	1.00	31.06
	ATOM 51	CA	ARG	1470	-12.240	-0.636	9.917	1.00	31.86
	ATOM 52	CB	ARG	1470	-11.386	-0.860	8.660	1.00	31.36
	ATOM 53	CG	ARG	1470	-12.107	-1.437	7.448	1.00	33.08
	ATOM 54	CD	ARG	1470	-11.148	-1.588	6.248	1.00	31.08
	ATOM 55	NE	ARG	1470	-10.540	-0.310	5.891	1.00	34.36

	ATOM	57	CZ	ARG	1470	-9.656	-0.135	4.919	1.00	33.32
	ATOM	58	NH1	ARG	1470	-9.260	-1.164	4.185	1.00	35.90
	ATOM	61	NH2	ARG	1470	-9.155	1.074	4.687	1.00	32.79
	ATOM	64	C	ARG	1470	-11.290	-0.436	11.095	1.00	32.68
5	ATOM	65	O	ARG	1470	-10.820	-1.410	11.683	1.00	33.43
	ATOM	66	N	TRP	1471	-11.031	0.814	11.456	1.00	31.84
	ATOM	68	CA	TRP	1471	-10.063	1.090	12.505	1.00	31.17
	ATOM	69	CB	TRP	1471	-8.816	1.677	11.850	1.00	30.15
	ATOM	70	CG	TRP	1471	-8.173	0.725	10.941	1.00	29.54
	ATOM	71	CD2	TRP	1471	-7.288	-0.329	11.315	1.00	31.07
	ATOM	72	CE2	TRP	1471	-6.913	-0.992	10.132	1.00	34.41
	ATOM	73	CE3	TRP	1471	-6.762	-0.768	12.536	1.00	29.46
	ATOM	74	CD1	TRP	1471	-8.309	0.660	9.587	1.00	30.20
10	ATOM	75	NE1	TRP	1471	-7.557	-0.371	9.089	1.00	33.09
	ATOM	77	CZ2	TRP	1471	-6.042	-2.085	10.135	1.00	31.68
	ATOM	78	CZ3	TRP	1471	-5.897	-1.853	12.540	1.00	29.65
	ATOM	79	CH2	TRP	1471	-5.541	-2.494	11.347	1.00	30.18
	ATOM	80	C	TRP	1471	-10.477	2.019	13.620	1.00	29.94
	ATOM	81	O	TRP	1471	-9.782	2.108	14.631	1.00	30.00
	ATOM	82	N	GLU	1472	-11.573	2.737	13.416	1.00	29.06
	ATOM	84	CA	GLU	1472	-12.051	3.706	14.380	1.00	28.62
	ATOM	85	CB	GLU	1472	-13.312	4.386	13.849	1.00	29.16
	ATOM	86	CG	GLU	1472	-13.641	5.733	14.529	1.00	30.74
15	ATOM	87	CD	GLU	1472	-12.676	6.848	14.156	1.00	30.05
	ATOM	88	OE1	GLU	1472	-12.090	6.799	13.057	1.00	31.32
	ATOM	89	OE2	GLU	1472	-12.511	7.784	14.961	1.00	30.26
	ATOM	90	C	GLU	1472	-12.327	3.159	15.767	1.00	28.70
	ATOM	91	O	GLU	1472	-12.969	2.125	15.916	1.00	31.01
	ATOM	92	N	LEU	1473	-11.810	3.842	16.781	1.00	27.38
	ATOM	94	CA	LEU	1473	-12.054	3.451	18.161	1.00	29.61
	ATOM	95	CB	LEU	1473	-10.763	3.073	18.899	1.00	28.56
	ATOM	96	CG	LEU	1473	-10.923	2.756	20.403	1.00	30.06
20	ATOM	97	CD1	LEU	1473	-11.485	1.354	20.639	1.00	28.42
	ATOM	98	CD2	LEU	1473	-9.595	2.876	21.115	1.00	28.15
	ATOM	99	C	LEU	1473	-12.617	4.714	18.764	1.00	31.81
	ATOM	100	O	LEU	1473	-12.179	5.814	18.407	1.00	33.00
	ATOM	101	N	PRO	1474	-13.670	4.591	19.596	1.00	31.45
	ATOM	102	CD	PRO	1474	-14.488	3.400	19.859	1.00	31.72
	ATOM	103	CA	PRO	1474	-14.261	5.774	20.226	1.00	31.23
	ATOM	104	CB	PRO	1474	-15.400	5.176	21.048	1.00	29.01
	ATOM	105	CG	PRO	1474	-15.815	4.005	20.247	1.00	29.09
25	ATOM	106	C	PRO	1474	-13.217	6.444	21.120	1.00	33.36
	ATOM	107	O	PRO	1474	-12.447	5.765	21.808	1.00	36.40
	ATOM	108	N	ARG	1475	-13.188	7.770	21.112	1.00	33.67
	ATOM	110	CA	ARG	1475	-12.228	8.498	21.924	1.00	33.96
	ATOM	111	CB	ARG	1475	-12.433	9.991	21.735	1.00	35.31
	ATOM	112	CG	ARG	1475	-12.134	10.405	20.333	1.00	40.10
	ATOM	113	CD	ARG	1475	-12.060	11.906	20.145	1.00	42.98
	ATOM	114	NE	ARG	1475	-11.785	12.194	18.737	1.00	42.91
	ATOM	116	CZ	ARG	1475	-10.578	12.443	18.253	1.00	41.30
30	ATOM	117	NH1	ARG	1475	-9.529	12.467	19.064	1.00	41.88
	ATOM	120	NH2	ARG	1475	-10.413	12.567	16.943	1.00	40.98
	ATOM	123	C	ARG	1475	-12.278	8.142	23.404	1.00	35.88
	ATOM	124	O	ARG	1475	-11.240	8.046	24.061	1.00	37.10
	ATOM	125	N	ASP	1476	-13.479	7.920	23.928	1.00	36.47
	ATOM	127	CA	ASP	1476	-13.632	7.581	25.335	1.00	37.24
	ATOM	128	CB	ASP	1476	-15.112	7.629	25.741	1.00	39.66
	ATOM	129	CG	ASP	1476	-15.930	6.480	25.163	1.00	42.38
	ATOM	130	OD1	ASP	1476	-15.438	5.706	24.322	1.00	47.52
35	ATOM	131	OD2	ASP	1476	-17.098	6.349	25.568	1.00	48.06
	ATOM	132	C	ASP	1476	-13.023	6.232	25.724	1.00	36.93

	ATOM	133	O	ASP	1476	-13.034	5.856	26.898	1.00	40.09
	ATOM	134	N	ARG	1477	-12.564	5.475	24.732	1.00	34.34
	ATOM	136	CA	ARG	1477	-11.961	4.171	24.993	1.00	32.47
	ATOM	137	CB	ARG	1477	-12.269	3.212	23.852	1.00	31.59
5	ATOM	138	CG	ARG	1477	-13.716	2.939	23.640	1.00	29.66
	ATOM	139	CD	ARG	1477	-14.314	2.342	24.875	1.00	30.65
	ATOM	140	NE	ARG	1477	-14.498	3.342	25.918	1.00	31.37
	ATOM	142	CZ	ARG	1477	-14.822	3.055	27.174	1.00	32.81
	ATOM	143	NH1	ARG	1477	-15.002	1.794	27.549	1.00	33.92
	ATOM	146	NH2	ARG	1477	-14.950	4.025	28.062	1.00	31.74
	ATOM	149	C	ARG	1477	-10.452	4.266	25.153	1.00	33.13
	ATOM	150	O	ARG	1477	-9.777	3.281	25.445	1.00	33.55
	ATOM	151	N	LEU	1478	-9.923	5.466	24.984	1.00	34.43
10	ATOM	153	CA	LEU	1478	-8.493	5.663	25.076	1.00	35.68
	ATOM	154	CB	LEU	1478	-8.008	6.350	23.790	1.00	34.98
	ATOM	155	CG	LEU	1478	-6.581	6.137	23.284	1.00	31.11
	ATOM	156	CD1	LEU	1478	-6.280	4.650	23.161	1.00	26.62
	ATOM	157	CD2	LEU	1478	-6.428	6.839	21.940	1.00	28.80
	ATOM	158	C	LEU	1478	-8.158	6.505	26.295	1.00	36.21
	ATOM	159	O	LEU	1478	-8.501	7.688	26.361	1.00	39.67
	ATOM	160	N	VAL	1479	-7.558	5.878	27.293	1.00	35.42
	ATOM	162	CA	VAL	1479	-7.156	6.599	28.491	1.00	35.80
	ATOM	163	CB	VAL	1479	-7.269	5.707	29.742	1.00	36.29
15	ATOM	164	CG1	VAL	1479	-7.017	6.527	30.983	1.00	37.23
	ATOM	165	CG2	VAL	1479	-8.650	5.059	29.812	1.00	34.41
	ATOM	166	C	VAL	1479	-5.704	7.046	28.244	1.00	35.68
	ATOM	167	O	VAL	1479	-4.764	6.246	28.319	1.00	33.45
	ATOM	168	N	LEU	1480	-5.538	8.315	27.885	1.00	38.15
	ATOM	170	CA	LEU	1480	-4.213	8.860	27.584	1.00	42.61
	ATOM	171	CB	LEU	1480	-4.332	10.205	26.857	1.00	39.14
	ATOM	172	CG	LEU	1480	-4.969	10.179	25.460	1.00	38.44
	ATOM	173	CD1	LEU	1480	-4.901	11.579	24.879	1.00	39.39
20	ATOM	174	CD2	LEU	1480	-4.263	9.194	24.533	1.00	36.86
	ATOM	175	C	LEU	1480	-3.274	8.970	28.783	1.00	46.37
	ATOM	176	O	LEU	1480	-3.659	9.445	29.850	1.00	48.86
	ATOM	177	N	GLY	1481	-2.033	8.537	28.594	1.00	47.13
	ATOM	179	CA	GLY	1481	-1.081	8.573	29.678	1.00	48.19
	ATOM	180	C	GLY	1481	0.163	9.388	29.425	1.00	50.27
	ATOM	181	O	GLY	1481	0.152	10.367	28.675	1.00	51.19
	ATOM	182	N	LYS	1482	1.240	8.965	30.078	1.00	50.93
	ATOM	184	CA	LYS	1482	2.543	9.606	30.007	1.00	50.94
25	ATOM	185	CB	LYS	1482	3.509	8.866	30.933	1.00	50.41
	ATOM	186	CG	LYS	1482	4.971	9.026	30.567	1.00	51.87
	ATOM	187	CD	LYS	1482	5.810	7.874	31.087	1.00	53.49
	ATOM	188	CE	LYS	1482	5.390	6.542	30.478	1.00	50.77
	ATOM	189	NZ	LYS	1482	6.251	5.433	30.986	1.00	49.92
	ATOM	193	C	LYS	1482	3.145	9.676	28.609	1.00	52.31
	ATOM	194	O	LYS	1482	3.115	8.700	27.851	1.00	52.30
	ATOM	195	N	PRO	1483	3.706	10.838	28.250	1.00	53.47
	ATOM	196	CD	PRO	1483	3.667	12.105	28.997	1.00	54.19
30	ATOM	197	CA	PRO	1483	4.326	11.021	26.937	1.00	54.10
	ATOM	198	CB	PRO	1483	4.772	12.480	26.976	1.00	54.25
	ATOM	199	CG	PRO	1483	3.772	13.118	27.895	1.00	55.30
	ATOM	200	C	PRO	1483	5.535	10.096	26.827	1.00	54.72
	ATOM	201	O	PRO	1483	6.343	10.017	27.751	1.00	53.48
	ATOM	202	N	LEU	1484	5.619	9.351	25.731	1.00	57.05
	ATOM	204	CA	LEU	1484	6.739	8.447	25.503	1.00	59.26
	ATOM	205	CB	LEU	1484	6.307	7.241	24.669	1.00	59.35
	ATOM	206	CG	LEU	1484	5.391	6.216	25.343	1.00	60.87
35	ATOM	207	CD1	LEU	1484	4.975	5.161	24.329	1.00	57.14
	ATOM	208	CD2	LEU	1484	6.081	5.571	26.551	1.00	59.79

	ATOM	209	C	LEU	1484	7.847	9.194	24.778	1.00	61.30
	ATOM	210	O	LEU	1484	8.980	8.720	24.701	1.00	62.17
	ATOM	211	N	GLY	1485	7.494	10.351	24.220	1.00	63.75
	ATOM	213	CA	GLY	1485	8.456	11.173	23.507	1.00	66.33
5	ATOM	214	C	GLY	1485	8.081	11.412	22.054	1.00	67.79
	ATOM	215	O	GLY	1485	6.918	11.653	21.727	1.00	69.61
	ATOM	216	N	GLN	1491	4.615	13.762	18.385	1.00	58.26
	ATOM	218	CA	GLN	1491	4.353	13.353	19.762	1.00	57.98
	ATOM	219	CB	GLN	1491	3.476	14.379	20.468	1.00	61.80
	ATOM	220	CG	GLN	1491	3.134	14.034	21.920	1.00	70.31
	ATOM	221	CD	GLN	1491	2.019	14.911	22.482	1.00	75.91
	ATOM	222	OE1	GLN	1491	1.355	15.636	21.748	1.00	77.85
	ATOM	223	NE2	GLN	1491	1.820	14.832	23.788	1.00	78.30
	ATOM	226	C	GLN	1491	3.709	11.965	19.881	1.00	54.67
10	ATOM	227	O	GLN	1491	2.701	11.669	19.222	1.00	54.91
	ATOM	228	N	VAL	1492	4.305	11.125	20.729	1.00	50.04
	ATOM	230	CA	VAL	1492	3.825	9.763	20.988	1.00	44.93
	ATOM	231	CB	VAL	1492	4.861	8.705	20.583	1.00	42.65
	ATOM	232	CG1	VAL	1492	4.378	7.325	20.958	1.00	39.71
	ATOM	233	CG2	VAL	1492	5.119	8.766	19.099	1.00	40.98
	ATOM	234	C	VAL	1492	3.584	9.661	22.490	1.00	43.43
	ATOM	235	O	VAL	1492	4.451	10.029	23.289	1.00	43.43
	ATOM	236	N	VAL	1493	2.400	9.212	22.888	1.00	41.13
15	ATOM	238	CA	VAL	1493	2.107	9.080	24.304	1.00	38.77
	ATOM	239	CB	VAL	1493	1.052	10.133	24.782	1.00	36.35
	ATOM	240	CG1	VAL	1493	1.410	11.508	24.287	1.00	36.06
	ATOM	241	CG2	VAL	1493	-0.329	9.755	24.339	1.00	37.64
	ATOM	242	C	VAL	1493	1.589	7.693	24.619	1.00	37.77
	ATOM	243	O	VAL	1493	0.948	7.058	23.783	1.00	38.88
	ATOM	244	N	LEU	1494	1.949	7.187	25.790	1.00	36.24
	ATOM	246	CA	LEU	1494	1.468	5.880	26.205	1.00	35.92
	ATOM	247	CB	LEU	1494	2.252	5.383	27.429	1.00	35.41
20	ATOM	248	CG	LEU	1494	1.886	4.009	28.004	1.00	36.21
	ATOM	249	CD1	LEU	1494	1.927	2.931	26.924	1.00	33.60
	ATOM	250	CD2	LEU	1494	2.835	3.670	29.145	1.00	36.03
	ATOM	251	C	LEU	1494	-0.010	6.095	26.564	1.00	35.27
	ATOM	252	O	LEU	1494	-0.425	7.215	26.887	1.00	34.35
	ATOM	253	N	ALA	1495	-0.807	5.043	26.468	1.00	34.93
	ATOM	255	CA	ALA	1495	-2.220	5.145	26.768	1.00	34.44
	ATOM	256	CB	ALA	1495	-2.955	5.794	25.616	1.00	35.29
	ATOM	257	C	ALA	1495	-2.781	3.770	27.018	1.00	34.59
25	ATOM	258	O	ALA	1495	-2.128	2.766	26.748	1.00	35.52
	ATOM	259	N	GLU	1496	-3.996	3.723	27.536	1.00	36.64
	ATOM	261	CA	GLU	1496	-4.652	2.462	27.806	1.00	37.57
	ATOM	262	CB	GLU	1496	-5.000	2.354	29.287	1.00	38.97
	ATOM	263	CG	GLU	1496	-3.769	2.304	30.185	1.00	41.79
	ATOM	264	CD	GLU	1496	-4.110	2.475	31.645	1.00	43.65
	ATOM	265	OE1	GLU	1496	-4.408	3.617	32.036	1.00	42.97
	ATOM	266	OE2	GLU	1496	-4.086	1.475	32.398	1.00	46.65
	ATOM	267	C	GLU	1496	-5.896	2.404	26.943	1.00	38.50
30	ATOM	268	O	GLU	1496	-6.660	3.371	26.867	1.00	40.28
	ATOM	269	N	ALA	1497	-6.051	1.301	26.223	1.00	37.34
	ATOM	271	CA	ALA	1497	-7.194	1.131	25.352	1.00	37.42
	ATOM	272	CB	ALA	1497	-6.743	0.625	23.985	1.00	35.92
	ATOM	273	C	ALA	1497	-8.146	0.148	26.000	1.00	36.77
	ATOM	274	O	ALA	1497	-7.759	-0.977	26.323	1.00	35.74
	ATOM	275	N	ILE	1498	-9.354	0.616	26.291	1.00	37.03
	ATOM	277	CA	ILE	1498	-10.378	-0.224	26.896	1.00	36.80
	ATOM	278	CB	ILE	1498	-11.372	0.612	27.728	1.00	34.53
35	ATOM	279	CG2	ILE	1498	-12.373	-0.290	28.425	1.00	34.59
	ATOM	280	CG1	ILE	1498	-10.640	1.438	28.778	1.00	31.97

	ATOM	281	CD1	ILE	1498	-11.552	2.344	29.541	1.00	31.12
	ATOM	282	C	ILE	1498	-11.126	-0.807	25.709	1.00	38.72
	ATOM	283	O	ILE	1498	-11.647	-0.066	24.879	1.00	37.74
	ATOM	284	N	GLY	1499	-11.137	-2.126	25.590	1.00	40.98
5	ATOM	286	CA	GLY	1499	-11.839	-2.728	24.482	1.00	44.64
	ATOM	287	C	GLY	1499	-10.931	-3.115	23.332	1.00	48.45
	ATOM	288	O	GLY	1499	-10.260	-4.147	23.401	1.00	51.92
	ATOM	289	N	LEU	1500	-10.877	-2.269	22.303	1.00	47.87
	ATOM	291	CA	LEU	1500	-10.076	-2.530	21.102	1.00	46.80
	ATOM	292	CB	LEU	1500	-8.594	-2.770	21.434	1.00	45.37
	ATOM	293	CG	LEU	1500	-7.543	-1.661	21.293	1.00	44.84
	ATOM	294	CD1	LEU	1500	-6.174	-2.290	21.450	1.00	43.33
	ATOM	295	CD2	LEU	1500	-7.623	-0.959	19.948	1.00	40.43
	ATOM	296	C	LEU	1500	-10.631	-3.737	20.349	1.00	45.63
10	ATOM	297	O	LEU	1500	-10.797	-4.823	20.915	1.00	44.42
	ATOM	298	N	PRO	1505	-13.569	-5.910	25.549	1.00	52.13
	ATOM	299	CD	PRO	1505	-14.316	-7.170	25.398	1.00	54.09
	ATOM	300	CA	PRO	1505	-14.451	-4.828	25.999	1.00	50.46
	ATOM	301	CB	PRO	1505	-15.841	-5.455	25.891	1.00	49.86
	ATOM	302	CG	PRO	1505	-15.586	-6.898	26.193	1.00	52.17
	ATOM	303	C	PRO	1505	-14.136	-4.370	27.422	1.00	47.75
	ATOM	304	O	PRO	1505	-14.148	-3.180	27.710	1.00	47.93
	ATOM	305	N	ASN	1506	-13.778	-5.313	28.285	1.00	46.20
15	ATOM	307	CA	ASN	1506	-13.458	-4.986	29.666	1.00	49.52
	ATOM	308	CB	ASN	1506	-14.310	-5.829	30.612	1.00	52.42
	ATOM	309	CG	ASN	1506	-15.788	-5.489	30.526	1.00	54.50
	ATOM	310	OD1	ASN	1506	-16.179	-4.331	30.680	1.00	57.16
	ATOM	311	ND2	ASN	1506	-16.610	-6.489	30.244	1.00	56.82
	ATOM	314	C	ASN	1506	-11.973	-5.124	30.003	1.00	50.65
	ATOM	315	O	ASN	1506	-11.583	-5.174	31.178	1.00	50.65
	ATOM	316	N	ARG	1507	-11.142	-5.145	28.968	1.00	50.90
	ATOM	318	CA	ARG	1507	-9.700	-5.276	29.127	1.00	49.77
20	ATOM	319	CB	ARG	1507	-9.192	-6.483	28.339	1.00	55.81
	ATOM	320	CG	ARG	1507	-9.450	-7.833	28.988	1.00	61.63
	ATOM	321	CD	ARG	1507	-8.408	-8.149	30.041	1.00	66.01
	ATOM	322	NE	ARG	1507	-8.600	-9.490	30.583	1.00	72.55
	ATOM	324	CZ	ARG	1507	-8.024	-9.944	31.694	1.00	77.32
	ATOM	325	NH1	ARG	1507	-7.198	-9.169	32.392	1.00	78.41
	ATOM	328	NH2	ARG	1507	-8.335	-11.151	32.147	1.00	79.30
	ATOM	331	C	ARG	1507	-9.015	-4.036	28.595	1.00	45.60
	ATOM	332	O	ARG	1507	-9.452	-3.464	27.590	1.00	42.08
25	ATOM	333	N	VAL	1508	-7.977	-3.597	29.297	1.00	42.86
	ATOM	335	CA	VAL	1508	-7.216	-2.443	28.858	1.00	40.75
	ATOM	336	CB	VAL	1508	-6.903	-1.428	30.010	1.00	38.75
	ATOM	337	CG1	VAL	1508	-8.184	-1.015	30.702	1.00	43.29
	ATOM	338	CG2	VAL	1508	-5.919	-2.005	31.012	1.00	37.56
	ATOM	339	C	VAL	1508	-5.929	-2.970	28.248	1.00	39.14
	ATOM	340	O	VAL	1508	-5.369	-3.972	28.708	1.00	39.16
	ATOM	341	N	THR	1509	-5.517	-2.345	27.157	1.00	37.26
	ATOM	343	CA	THR	1509	-4.298	-2.737	26.486	1.00	36.52
30	ATOM	344	CB	THR	1509	-4.571	-3.187	25.019	1.00	37.83
	ATOM	345	OG1	THR	1509	-5.423	-4.340	25.011	1.00	43.88
	ATOM	347	CG2	THR	1509	-3.267	-3.540	24.310	1.00	34.51
	ATOM	348	C	THR	1509	-3.434	-1.495	26.473	1.00	35.82
	ATOM	349	O	THR	1509	-3.927	-0.408	26.174	1.00	34.37
	ATOM	350	N	LYS	1510	-2.175	-1.628	26.880	1.00	35.96
	ATOM	352	CA	LYS	1510	-1.291	-0.479	26.843	1.00	36.13
	ATOM	353	CB	LYS	1510	-0.032	-0.695	27.680	1.00	37.77
	ATOM	354	CG	LYS	1510	-0.277	-0.854	29.162	1.00	44.58
35	ATOM	355	CD	LYS	1510	1.023	-0.658	29.948	1.00	51.33
	ATOM	356	CE	LYS	1510	0.947	-1.286	31.342	1.00	58.15

	ATOM	357	NZ	LYS	1510	-0.149	-0.728	32.187	1.00	64.94
	ATOM	361	C	LYS	1510	-0.929	-0.355	25.373	1.00	34.59
	ATOM	362	O	LYS	1510	-0.574	-1.345	24.734	1.00	31.43
	ATOM	363	N	VAL	1511	-1.092	0.846	24.835	1.00	32.95
	ATOM	365	CA	VAL	1511	-0.810	1.121	23.441	1.00	32.29
5	ATOM	366	CB	VAL	1511	-2.129	1.213	22.621	1.00	32.95
	ATOM	367	CG1	VAL	1511	-2.879	-0.109	22.686	1.00	34.79
	ATOM	368	CG2	VAL	1511	-3.026	2.354	23.148	1.00	32.84
	ATOM	369	C	VAL	1511	-0.058	2.446	23.353	1.00	32.65
	ATOM	370	O	VAL	1511	0.021	3.185	24.344	1.00	31.62
	ATOM	371	N	ALA	1512	0.521	2.721	22.186	1.00	30.24
	ATOM	373	CA	ALA	1512	1.244	3.969	21.954	1.00	28.18
	ATOM	374	CB	ALA	1512	2.599	3.700	21.316	1.00	25.62
	ATOM	375	C	ALA	1512	0.373	4.783	21.015	1.00	27.54
10	ATOM	376	O	ALA	1512	-0.151	4.264	20.040	1.00	27.17
	ATOM	377	N	VAL	1513	0.204	6.054	21.322	1.00	30.52
	ATOM	379	CA	VAL	1513	-0.630	6.914	20.503	1.00	34.08
	ATOM	380	CB	VAL	1513	-1.731	7.591	21.347	1.00	34.61
	ATOM	381	CG1	VAL	1513	-2.607	8.444	20.474	1.00	36.75
	ATOM	382	CG2	VAL	1513	-2.567	6.549	22.087	1.00	33.45
	ATOM	383	C	VAL	1513	0.203	8.008	19.837	1.00	36.38
	ATOM	384	O	VAL	1513	0.924	8.750	20.510	1.00	35.32
	ATOM	385	N	LYS	1514	0.105	8.093	18.513	1.00	38.19
15	ATOM	387	CA	LYS	1514	0.818	9.104	17.746	1.00	40.12
	ATOM	388	CB	LYS	1514	1.339	8.513	16.439	1.00	40.93
	ATOM	389	CG	LYS	1514	2.452	7.488	16.632	1.00	42.52
	ATOM	390	CD	LYS	1514	2.861	6.803	15.338	1.00	46.25
	ATOM	391	CE	LYS	1514	3.268	7.796	14.261	1.00	49.76
	ATOM	392	NZ	LYS	1514	4.304	8.771	14.705	1.00	52.14
	ATOM	396	C	LYS	1514	-0.166	10.215	17.458	1.00	40.69
	ATOM	397	O	LYS	1514	-1.313	9.953	17.110	1.00	41.69
	ATOM	398	N	MET	1515	0.277	11.454	17.613	1.00	43.28
20	ATOM	400	CA	MET	1515	-0.569	12.610	17.379	1.00	46.21
	ATOM	401	CB	MET	1515	-1.363	12.936	18.644	1.00	46.96
	ATOM	402	CG	MET	1515	-0.488	13.293	19.837	1.00	47.61
	ATOM	403	SD	MET	1515	-1.413	13.464	21.358	1.00	49.77
	ATOM	404	CE	MET	1515	-1.593	11.761	21.814	1.00	47.84
	ATOM	405	C	MET	1515	0.299	13.805	17.000	1.00	49.90
	ATOM	406	O	MET	1515	1.519	13.788	17.194	1.00	49.83
	ATOM	407	N	LEU	1516	-0.339	14.822	16.430	1.00	54.45
	ATOM	409	CA	LEU	1516	0.335	16.053	16.023	1.00	57.57
25	ATOM	410	CB	LEU	1516	-0.483	16.762	14.944	1.00	54.10
	ATOM	411	CG	LEU	1516	-0.800	16.007	13.664	1.00	50.71
	ATOM	412	CD1	LEU	1516	-1.830	16.800	12.901	1.00	51.20
	ATOM	413	CD2	LEU	1516	0.467	15.809	12.849	1.00	50.08
	ATOM	414	C	LEU	1516	0.487	17.010	17.202	1.00	61.88
	ATOM	415	O	LEU	1516	-0.170	16.852	18.235	1.00	63.30
	ATOM	416	N	LYS	1517	1.335	18.018	17.021	1.00	66.83
	ATOM	418	CA	LYS	1517	1.568	19.036	18.037	1.00	71.46
	ATOM	419	CB	LYS	1517	2.985	19.593	17.911	1.00	76.28
30	ATOM	420	CG	LYS	1517	4.084	18.626	18.349	1.00	82.19
	ATOM	421	CD	LYS	1517	5.450	19.085	17.846	1.00	86.93
	ATOM	422	CE	LYS	1517	6.579	18.228	18.411	1.00	90.46
	ATOM	423	NZ	LYS	1517	7.896	18.513	17.763	1.00	92.51
	ATOM	427	C	LYS	1517	0.549	20.156	17.837	1.00	72.44
	ATOM	428	O	LYS	1517	-0.142	20.198	16.819	1.00	72.12
	ATOM	429	N	SER	1518	0.474	21.075	18.793	1.00	73.90
	ATOM	431	CA	SER	1518	-0.470	22.185	18.697	1.00	74.96
	ATOM	432	CB	SER	1518	-0.498	22.980	20.002	1.00	74.72
35	ATOM	433	C	SER	1518	-0.133	23.100	17.525	1.00	76.16
	ATOM	434	O	SER	1518	-1.029	23.667	16.897	1.00	76.56

	ATOM	435	N	ASP	1519	1.158	23.245	17.232	1.00	77.24
	ATOM	437	CA	ASP	1519	1.601	24.094	16.125	1.00	78.51
	ATOM	438	CB	ASP	1519	2.849	24.888	16.535	1.00	79.70
	ATOM	439	C	ASP	1519	1.887	23.264	14.865	1.00	78.29
	ATOM	440	O	ASP	1519	2.797	23.580	14.088	1.00	78.52
5	ATOM	441	N	ALA	1520	1.121	22.192	14.682	1.00	76.90
	ATOM	443	CA	ALA	1520	1.285	21.313	13.529	1.00	74.09
	ATOM	444	CB	ALA	1520	0.737	19.930	13.840	1.00	74.20
	ATOM	445	C	ALA	1520	0.580	21.895	12.318	1.00	71.82
	ATOM	446	O	ALA	1520	-0.573	22.311	12.400	1.00	71.78
	ATOM	447	N	THR	1521	1.291	21.951	11.202	1.00	69.97
	ATOM	449	CA	THR	1521	0.734	22.480	9.970	1.00	68.86
	ATOM	450	CB	THR	1521	1.848	22.911	9.026	1.00	68.87
	ATOM	451	OG1	THR	1521	2.621	21.762	8.651	1.00	70.03
10	ATOM	453	CG2	THR	1521	2.756	23.912	9.715	1.00	71.55
	ATOM	454	C	THR	1521	-0.081	21.389	9.292	1.00	67.89
	ATOM	455	O	THR	1521	0.111	20.204	9.563	1.00	69.03
	ATOM	456	N	GLU	1522	-0.964	21.783	8.382	1.00	66.59
	ATOM	458	CA	GLU	1522	-1.785	20.821	7.657	1.00	65.71
	ATOM	459	CB	GLU	1522	-2.737	21.532	6.692	1.00	65.61
	ATOM	460	C	GLU	1522	-0.886	19.823	6.909	1.00	64.32
	ATOM	461	O	GLU	1522	-1.324	18.729	6.549	1.00	66.29
	ATOM	462	N	LYS	1523	0.367	20.205	6.677	1.00	59.93
15	ATOM	464	CA	LYS	1523	1.314	19.326	6.016	1.00	57.38
	ATOM	465	CB	LYS	1523	2.629	20.064	5.747	1.00	60.47
	ATOM	466	CG	LYS	1523	3.815	19.162	5.370	1.00	62.75
	ATOM	467	CD	LYS	1523	3.510	18.288	4.160	1.00	63.95
	ATOM	468	CE	LYS	1523	4.759	17.596	3.652	1.00	65.88
	ATOM	469	NZ	LYS	1523	4.429	16.721	2.494	1.00	70.37
	ATOM	473	C	LYS	1523	1.565	18.173	6.974	1.00	54.80
	ATOM	474	O	LYS	1523	1.548	17.003	6.581	1.00	54.44
	ATOM	475	N	ASP	1524	1.786	18.523	8.239	1.00	51.67
20	ATOM	477	CA	ASP	1524	2.036	17.549	9.295	1.00	49.43
	ATOM	478	CB	ASP	1524	2.297	18.271	10.622	1.00	51.06
	ATOM	479	CG	ASP	1524	3.598	19.080	10.613	1.00	54.03
	ATOM	480	OD1	ASP	1524	3.649	20.136	11.283	1.00	56.32
	ATOM	481	OD2	ASP	1524	4.580	18.658	9.956	1.00	56.02
	ATOM	482	C	ASP	1524	0.847	16.596	9.413	1.00	47.73
	ATOM	483	O	ASP	1524	1.017	15.387	9.580	1.00	45.85
	ATOM	484	N	LEU	1525	-0.354	17.155	9.300	1.00	47.62
	ATOM	486	CA	LEU	1525	-1.585	16.380	9.354	1.00	45.95
25	ATOM	487	CB	LEU	1525	-2.801	17.307	9.271	1.00	43.61
	ATOM	488	CG	LEU	1525	-4.193	16.665	9.234	1.00	44.56
	ATOM	489	CD1	LEU	1525	-4.364	15.543	10.268	1.00	46.02
	ATOM	490	CD2	LEU	1525	-5.215	17.740	9.468	1.00	43.80
	ATOM	491	C	LEU	1525	-1.605	15.372	8.210	1.00	45.67
	ATOM	492	O	LEU	1525	-1.921	14.204	8.416	1.00	46.78
	ATOM	493	N	SER	1526	-1.245	15.822	7.014	1.00	45.44
	ATOM	495	CA	SER	1526	-1.211	14.945	5.851	1.00	46.33
	ATOM	496	CB	SER	1526	-0.903	15.744	4.584	1.00	48.48
30	ATOM	497	OG	SER	1526	-2.012	16.546	4.218	1.00	57.28
	ATOM	499	C	SER	1526	-0.192	13.821	5.995	1.00	43.84
	ATOM	500	O	SER	1526	-0.480	12.669	5.674	1.00	45.24
	ATOM	501	N	ASP	1527	0.994	14.144	6.489	1.00	40.88
	ATOM	503	CA	ASP	1527	2.024	13.128	6.646	1.00	39.70
	ATOM	504	CB	ASP	1527	3.376	13.767	6.960	1.00	37.62
	ATOM	505	CG	ASP	1527	3.934	14.555	5.786	1.00	37.01
	ATOM	506	OD1	ASP	1527	3.399	14.434	4.657	1.00	35.78
	ATOM	507	OD2	ASP	1527	4.916	15.295	5.992	1.00	40.23
35	ATOM	508	C	ASP	1527	1.652	12.053	7.659	1.00	38.51
	ATOM	509	O	ASP	1527	1.951	10.872	7.461	1.00	37.68

	ATOM	510	N	LEU	1528	0.973	12.460	8.725	1.00	38.16
	ATOM	512	CA	LEU	1528	0.532	11.513	9.744	1.00	38.29
	ATOM	513	CB	LEU	1528	0.026	12.258	10.985	1.00	37.12
	ATOM	514	CG	LEU	1528	-0.505	11.412	12.153	1.00	39.03
5	ATOM	515	CD1	LEU	1528	0.499	10.323	12.539	1.00	35.39
	ATOM	516	CD2	LEU	1528	-0.825	12.315	13.334	1.00	35.29
	ATOM	517	C	LEU	1528	-0.568	10.611	9.155	1.00	38.10
	ATOM	518	O	LEU	1528	-0.607	9.400	9.413	1.00	37.21
	ATOM	519	N	ILE	1529	-1.450	11.210	8.355	1.00	36.71
	ATOM	521	CA	ILE	1529	-2.531	10.472	7.718	1.00	35.93
	ATOM	522	CB	ILE	1529	-3.486	11.419	6.931	1.00	35.67
	ATOM	523	CG2	ILE	1529	-4.492	10.619	6.119	1.00	34.04
	ATOM	524	CG1	ILE	1529	-4.259	12.295	7.916	1.00	33.81
10	ATOM	525	CD1	ILE	1529	-5.177	13.288	7.276	1.00	33.58
	ATOM	526	C	ILE	1529	-1.912	9.447	6.786	1.00	37.49
	ATOM	527	O	ILE	1529	-2.274	8.269	6.829	1.00	37.11
	ATOM	528	N	SER	1530	-0.926	9.893	6.003	1.00	38.20
	ATOM	530	CA	SER	1530	-0.217	9.036	5.050	1.00	37.49
	ATOM	531	CB	SER	1530	0.911	9.822	4.370	1.00	43.32
	ATOM	532	OG	SER	1530	0.424	10.970	3.687	1.00	52.31
	ATOM	534	C	SER	1530	0.382	7.808	5.719	1.00	34.40
	ATOM	535	O	SER	1530	0.234	6.691	5.219	1.00	31.51
15	ATOM	536	N	GLU	1531	1.048	8.028	6.851	1.00	32.08
	ATOM	538	CA	GLU	1531	1.690	6.952	7.594	1.00	30.60
	ATOM	539	CB	GLU	1531	2.506	7.515	8.759	1.00	29.70
	ATOM	540	CG	GLU	1531	3.094	6.428	9.657	1.00	30.53
	ATOM	541	CD	GLU	1531	3.871	6.962	10.839	1.00	33.17
	ATOM	542	OE1	GLU	1531	4.473	6.134	11.552	1.00	33.38
	ATOM	543	OE2	GLU	1531	3.883	8.193	11.062	1.00	37.52
	ATOM	544	C	GLU	1531	0.698	5.911	8.094	1.00	30.17
	ATOM	545	O	GLU	1531	0.991	4.714	8.100	1.00	29.76
20	ATOM	546	N	MET	1532	-0.464	6.379	8.530	1.00	31.34
	ATOM	548	CA	MET	1532	-1.521	5.496	9.015	1.00	30.72
	ATOM	549	CB	MET	1532	-2.666	6.336	9.591	1.00	29.99
	ATOM	550	CG	MET	1532	-3.880	5.523	10.020	1.00	30.10
	ATOM	551	SD	MET	1532	-5.173	6.510	10.727	1.00	29.46
	ATOM	552	CE	MET	1532	-5.462	7.682	9.455	1.00	23.76
	ATOM	553	C	MET	1532	-2.025	4.638	7.843	1.00	30.47
	ATOM	554	O	MET	1532	-2.080	3.401	7.925	1.00	27.05
	ATOM	555	N	GLU	1533	-2.387	5.319	6.756	1.00	30.56
25	ATOM	557	CA	GLU	1533	-2.863	4.674	5.542	1.00	30.56
	ATOM	558	CB	GLU	1533	-3.090	5.725	4.458	1.00	28.60
	ATOM	559	CG	GLU	1533	-4.226	6.677	4.761	1.00	29.08
	ATOM	560	CD	GLU	1533	-5.531	5.954	5.014	1.00	31.28
	ATOM	561	OE1	GLU	1533	-6.006	5.230	4.117	1.00	33.09
	ATOM	562	OE2	GLU	1533	-6.086	6.104	6.121	1.00	34.97
	ATOM	563	C	GLU	1533	-1.861	3.638	5.064	1.00	29.86
	ATOM	564	O	GLU	1533	-2.232	2.541	4.677	1.00	32.28
	ATOM	565	N	MET	1534	-0.590	4.014	5.107	1.00	32.54
30	ATOM	567	CA	MET	1534	0.515	3.145	4.719	1.00	33.39
	ATOM	568	CB	MET	1534	1.826	3.894	4.885	1.00	34.70
	ATOM	569	CG	MET	1534	3.038	3.047	4.654	1.00	44.51
	ATOM	570	SD	MET	1534	3.479	3.063	2.943	1.00	52.81
	ATOM	571	CE	MET	1534	4.349	4.607	2.874	1.00	47.34
	ATOM	572	C	MET	1534	0.530	1.896	5.607	1.00	32.98
	ATOM	573	O	MET	1534	0.689	0.776	5.115	1.00	34.00
	ATOM	574	N	MET	1535	0.364	2.100	6.910	1.00	31.92
	ATOM	576	CA	MET	1535	0.336	0.986	7.848	1.00	30.80
	ATOM	577	CB	MET	1535	0.252	1.503	9.294	1.00	33.77
35	ATOM	578	CG	MET	1535	1.509	2.216	9.810	1.00	32.26
	ATOM	579	SD	MET	1535	1.520	2.433	11.617	1.00	34.75

	ATOM	580	CE	MET	1535	1.183	4.173	11.723	1.00	37.86
	ATOM	581	C	MET	1535	-0.837	0.052	7.521	1.00	30.80
	ATOM	582	O	MET	1535	-0.704	-1.175	7.589	1.00	32.03
	ATOM	583	N	LYS	1536	-1.974	0.638	7.142	1.00	31.04
	ATOM	585	CA	LYS	1536	-3.170	-0.123	6.767	1.00	31.15
5	ATOM	586	CB	LYS	1536	-4.334	0.808	6.415	1.00	31.21
	ATOM	587	CG	LYS	1536	-4.864	1.625	7.552	1.00	27.76
	ATOM	588	CD	LYS	1536	-5.973	2.540	7.103	1.00	21.44
	ATOM	589	CE	LYS	1536	-6.434	3.401	8.248	1.00	24.69
	ATOM	590	NZ	LYS	1536	-7.578	4.241	7.868	1.00	25.84
	ATOM	594	C	LYS	1536	-2.887	-1.003	5.561	1.00	30.71
	ATOM	595	O	LYS	1536	-3.238	-2.175	5.560	1.00	34.73
	ATOM	596	N	MET	1537	-2.309	-0.412	4.523	1.00	31.18
	ATOM	598	CA	MET	1537	-1.967	-1.148	3.307	1.00	31.53
10	ATOM	599	CB	MET	1537	-1.370	-0.200	2.267	1.00	35.11
	ATOM	600	CG	MET	1537	-2.377	0.780	1.654	1.00	42.40
	ATOM	601	SD	MET	1537	-3.657	-0.051	0.685	1.00	50.10
	ATOM	602	CE	MET	1537	-3.069	0.266	-0.972	1.00	50.20
	ATOM	603	C	MET	1537	-0.976	-2.276	3.572	1.00	30.86
	ATOM	604	O	MET	1537	-1.218	-3.425	3.210	1.00	30.07
	ATOM	605	N	ILE	1538	0.119	-1.950	4.259	1.00	30.92
	ATOM	607	CA	ILE	1538	1.173	-2.923	4.563	1.00	28.12
	ATOM	608	CB	ILE	1538	2.359	-2.254	5.313	1.00	28.71
15	ATOM	609	CG2	ILE	1538	3.310	-3.303	5.865	1.00	29.72
	ATOM	610	CG1	ILE	1538	3.126	-1.343	4.350	1.00	30.79
	ATOM	611	CD1	ILE	1538	4.375	-0.745	4.945	1.00	32.46
	ATOM	612	C	ILE	1538	0.717	-4.179	5.299	1.00	26.33
	ATOM	613	O	ILE	1538	1.178	-5.276	4.996	1.00	24.20
	ATOM	614	N	GLY	1539	-0.188	-4.027	6.258	1.00	27.41
	ATOM	616	CA	GLY	1539	-0.651	-5.190	6.997	1.00	27.83
	ATOM	617	C	GLY	1539	0.240	-5.533	8.179	1.00	29.10
	ATOM	618	O	GLY	1539	1.308	-4.937	8.368	1.00	30.33
20	ATOM	619	N	LYS	1540	-0.157	-6.561	8.916	1.00	29.46
	ATOM	621	CA	LYS	1540	0.539	-6.976	10.120	1.00	29.27
	ATOM	622	CB	LYS	1540	-0.470	-7.520	11.139	1.00	27.01
	ATOM	623	CG	LYS	1540	-1.438	-6.483	11.638	1.00	29.58
	ATOM	624	CD	LYS	1540	-2.496	-7.103	12.530	1.00	39.41
	ATOM	625	CE	LYS	1540	-3.548	-6.069	12.952	1.00	44.14
	ATOM	626	NZ	LYS	1540	-2.994	-4.996	13.828	1.00	46.92
	ATOM	630	C	LYS	1540	1.679	-7.962	10.020	1.00	27.17
	ATOM	631	O	LYS	1540	1.745	-8.794	9.111	1.00	26.20
25	ATOM	632	N	HIS	1541	2.565	-7.856	11.006	1.00	26.96
	ATOM	634	CA	HIS	1541	3.690	-8.761	11.144	1.00	27.30
	ATOM	635	CB	HIS	1541	4.787	-8.506	10.120	1.00	22.20
	ATOM	636	CG	HIS	1541	5.849	-9.555	10.125	1.00	21.32
	ATOM	637	CD2	HIS	1541	5.886	-10.789	9.555	1.00	23.29
	ATOM	638	ND1	HIS	1541	7.052	-9.413	10.791	1.00	19.41
	ATOM	640	CE1	HIS	1541	7.775	-10.509	10.633	1.00	23.61
	ATOM	641	NE2	HIS	1541	7.097	-11.355	9.889	1.00	21.81
	ATOM	643	C	HIS	1541	4.245	-8.640	12.565	1.00	28.64
30	ATOM	644	O	HIS	1541	4.290	-7.549	13.132	1.00	30.64
	ATOM	645	N	LYS	1542	4.650	-9.791	13.108	1.00	29.47
	ATOM	647	CA	LYS	1542	5.200	-9.893	14.457	1.00	28.78
	ATOM	648	CB	LYS	1542	5.683	-11.326	14.714	1.00	30.16
	ATOM	649	CG	LYS	1542	6.232	-11.572	16.112	1.00	32.63
	ATOM	650	CD	LYS	1542	5.277	-11.046	17.155	1.00	42.90
	ATOM	651	CE	LYS	1542	5.659	-11.475	18.551	1.00	48.13
	ATOM	652	NZ	LYS	1542	4.726	-10.930	19.564	1.00	54.87
	ATOM	656	C	LYS	1542	6.351	-8.928	14.705	1.00	26.54
35	ATOM	657	O	LYS	1542	6.440	-8.321	15.773	1.00	26.19
	ATOM	658	N	ASN	1543	7.193	-8.733	13.697	1.00	24.36

	ATOM	660	CA	ASN	1543	8.357	-7.874	13.852	1.00	24.08
	ATOM	661	CB	ASN	1543	9.601	-8.596	13.359	1.00	22.69
	ATOM	662	CG	ASN	1543	9.781	-9.950	14.029	1.00	22.81
	ATOM	663	OD1	ASN	1543	9.664	-10.996	13.388	1.00	23.62
5	ATOM	664	ND2	ASN	1543	10.028	-9.938	15.324	1.00	24.94
	ATOM	667	C	ASN	1543	8.318	-6.429	13.377	1.00	23.48
	ATOM	668	O	ASN	1543	9.351	-5.861	13.059	1.00	22.94
	ATOM	669	N	ILE	1544	7.130	-5.821	13.380	1.00	24.15
	ATOM	671	CA	ILE	1544	6.976	-4.407	13.012	1.00	24.60
	ATOM	672	CB	ILE	1544	6.516	-4.191	11.531	1.00	24.90
	ATOM	673	CG2	ILE	1544	7.495	-4.852	10.571	1.00	21.57
	ATOM	674	CG1	ILE	1544	5.081	-4.688	11.316	1.00	26.66
	ATOM	675	CD1	ILE	1544	4.481	-4.321	9.945	1.00	23.98
10	ATOM	676	C	ILE	1544	5.954	-3.785	13.955	1.00	24.78
	ATOM	677	O	ILE	1544	5.160	-4.503	14.558	1.00	27.87
	ATOM	678	N	ILE	1545	6.035	-2.474	14.159	1.00	26.39
	ATOM	680	CA	ILE	1545	5.089	-1.779	15.025	1.00	26.79
	ATOM	681	CB	ILE	1545	5.588	-0.345	15.384	1.00	28.85
	ATOM	682	CG2	ILE	1545	4.512	0.449	16.103	1.00	23.60
	ATOM	683	CG1	ILE	1545	6.833	-0.423	16.269	1.00	27.20
	ATOM	684	CD1	ILE	1545	6.565	-0.990	17.639	1.00	27.12
	ATOM	685	C	ILE	1545	3.792	-1.708	14.224	1.00	26.99
	ATOM	686	O	ILE	1545	3.720	-1.023	13.197	1.00	27.61
15	ATOM	687	N	ASN	1546	2.809	-2.495	14.654	1.00	26.70
	ATOM	689	CA	ASN	1546	1.514	-2.565	13.983	1.00	26.53
	ATOM	690	CB	ASN	1546	0.871	-3.953	14.169	1.00	26.23
	ATOM	691	CG	ASN	1546	1.695	-5.072	13.551	1.00	24.96
	ATOM	692	OD1	ASN	1546	1.773	-5.206	12.330	1.00	28.08
	ATOM	693	ND2	ASN	1546	2.319	-5.872	14.387	1.00	22.38
	ATOM	696	C	ASN	1546	0.521	-1.497	14.418	1.00	26.89
	ATOM	697	O	ASN	1546	0.610	-0.952	15.523	1.00	27.40
	ATOM	698	N	LEU	1547	-0.349	-1.138	13.481	1.00	27.77
20	ATOM	700	CA	LEU	1547	-1.416	-0.175	13.701	1.00	28.28
	ATOM	701	CB	LEU	1547	-1.958	0.313	12.361	1.00	27.04
	ATOM	702	CG	LEU	1547	-3.199	1.194	12.408	1.00	25.74
	ATOM	703	CD1	LEU	1547	-2.836	2.575	12.950	1.00	27.66
	ATOM	704	CD2	LEU	1547	-3.799	1.289	11.014	1.00	23.38
	ATOM	705	C	LEU	1547	-2.498	-0.972	14.435	1.00	29.80
	ATOM	706	O	LEU	1547	-2.766	-2.135	14.105	1.00	28.63
	ATOM	707	N	LEU	1548	-3.088	-0.351	15.448	1.00	29.91
	ATOM	709	CA	LEU	1548	-4.114	-0.997	16.256	1.00	28.46
25	ATOM	710	CB	LEU	1548	-3.735	-0.956	17.749	1.00	26.76
	ATOM	711	CG	LEU	1548	-2.460	-1.701	18.162	1.00	22.44
	ATOM	712	CD1	LEU	1548	-2.277	-1.554	19.653	1.00	21.91
	ATOM	713	CD2	LEU	1548	-2.551	-3.179	17.778	1.00	20.79
	ATOM	714	C	LEU	1548	-5.480	-0.365	16.058	1.00	27.31
	ATOM	715	O	LEU	1548	-6.489	-1.043	16.193	1.00	28.25
	ATOM	716	N	GLY	1549	-5.506	0.925	15.732	1.00	24.02
	ATOM	718	CA	GLY	1549	-6.774	1.598	15.553	1.00	24.57
	ATOM	719	C	GLY	1549	-6.548	3.077	15.395	1.00	25.19
30	ATOM	720	O	GLY	1549	-5.400	3.488	15.231	1.00	28.77
	ATOM	721	N	ALA	1550	-7.617	3.875	15.427	1.00	24.66
	ATOM	723	CA	ALA	1550	-7.487	5.319	15.282	1.00	24.17
	ATOM	724	CB	ALA	1550	-7.206	5.680	13.824	1.00	24.29
	ATOM	725	C	ALA	1550	-8.695	6.103	15.765	1.00	23.95
	ATOM	726	O	ALA	1550	-9.810	5.590	15.780	1.00	24.95
	ATOM	727	N	CYS	1551	-8.444	7.336	16.199	1.00	25.03
	ATOM	729	CA	CYS	1551	-9.482	8.270	16.639	1.00	28.21
	ATOM	730	CB	CYS	1551	-9.221	8.774	18.055	1.00	26.76
35	ATOM	731	SG	CYS	1551	-9.378	7.521	19.317	1.00	34.39
	ATOM	732	C	CYS	1551	-9.359	9.426	15.656	1.00	29.98

	ATOM	733	O	CYS	1551	-8.482	10.281	15.800	1.00	32.14
	ATOM	734	N	THR	1552	-10.198	9.412	14.625	1.00	31.09
	ATOM	736	CA	THR	1552	-10.135	10.435	13.595	1.00	32.91
	ATOM	737	CB	THR	1552	-10.052	9.781	12.189	1.00	32.60
	ATOM	738	OG1	THR	1552	-11.276	9.097	11.890	1.00	32.12
5	ATOM	740	CG2	THR	1552	-8.928	8.768	12.144	1.00	32.74
	ATOM	741	C	THR	1552	-11.282	11.419	13.591	1.00	35.26
	ATOM	742	O	THR	1552	-11.171	12.525	13.057	1.00	35.10
	ATOM	743	N	GLN	1553	-12.397	11.014	14.179	1.00	39.01
	ATOM	745	CA	GLN	1553	-13.585	11.846	14.180	1.00	41.97
	ATOM	746	CB	GLN	1553	-14.832	10.968	14.020	1.00	41.17
	ATOM	747	CG	GLN	1553	-14.915	10.238	12.672	1.00	39.06
	ATOM	748	CD	GLN	1553	-14.900	11.200	11.496	1.00	41.84
	ATOM	749	OE1	GLN	1553	-15.785	12.045	11.359	1.00	41.92
10	ATOM	750	NE2	GLN	1553	-13.876	11.090	10.652	1.00	42.33
	ATOM	753	C	GLN	1553	-13.727	12.777	15.372	1.00	45.35
	ATOM	754	O	GLN	1553	-13.358	12.423	16.489	1.00	47.02
	ATOM	755	N	ASP	1554	-14.225	13.981	15.090	1.00	48.60
	ATOM	757	CA	ASP	1554	-14.479	15.016	16.084	1.00	50.64
	ATOM	758	CB	ASP	1554	-15.832	14.766	16.758	1.00	54.52
	ATOM	759	CG	ASP	1554	-17.003	14.955	15.809	1.00	60.54
	ATOM	760	OD1	ASP	1554	-18.072	15.409	16.274	1.00	66.04
	ATOM	761	OD2	ASP	1554	-16.860	14.661	14.601	1.00	65.09
15	ATOM	762	C	ASP	1554	-13.395	15.173	17.133	1.00	49.89
	ATOM	763	O	ASP	1554	-13.611	14.879	18.310	1.00	51.48
	ATOM	764	N	GLY	1555	-12.232	15.643	16.699	1.00	48.40
	ATOM	766	CA	GLY	1555	-11.131	15.834	17.617	1.00	46.16
	ATOM	767	C	GLY	1555	-9.798	15.626	16.935	1.00	44.64
	ATOM	768	O	GLY	1555	-9.737	15.581	15.716	1.00	45.22
	ATOM	769	N	PRO	1556	-8.708	15.525	17.702	1.00	44.68
	ATOM	770	CD	PRO	1556	-8.672	15.683	19.164	1.00	45.39
	ATOM	771	CA	PRO	1556	-7.359	15.326	17.177	1.00	42.95
20	ATOM	772	CB	PRO	1556	-6.484	15.549	18.411	1.00	43.74
	ATOM	773	CG	PRO	1556	-7.354	16.347	19.345	1.00	47.32
	ATOM	774	C	PRO	1556	-7.164	13.912	16.665	1.00	42.34
	ATOM	775	O	PRO	1556	-7.636	12.953	17.287	1.00	42.75
	ATOM	776	N	LEU	1557	-6.451	13.788	15.547	1.00	39.83
	ATOM	778	CA	LEU	1557	-6.169	12.490	14.954	1.00	36.64
	ATOM	779	CB	LEU	1557	-5.496	12.669	13.587	1.00	34.49
	ATOM	780	CG	LEU	1557	-5.009	11.404	12.870	1.00	31.29
	ATOM	781	CD1	LEU	1557	-6.169	10.436	12.628	1.00	27.86
25	ATOM	782	CD2	LEU	1557	-4.314	11.775	11.570	1.00	25.40
	ATOM	783	C	LEU	1557	-5.244	11.732	15.894	1.00	35.44
	ATOM	784	O	LEU	1557	-4.210	12.264	16.316	1.00	36.12
	ATOM	785	N	TYR	1558	-5.664	10.539	16.292	1.00	32.49
	ATOM	787	CA	TYR	1558	-4.861	9.697	17.157	1.00	31.87
	ATOM	788	CB	TYR	1558	-5.590	9.348	18.470	1.00	33.93
	ATOM	789	CG	TYR	1558	-5.695	10.476	19.471	1.00	35.34
	ATOM	790	CD1	TYR	1558	-6.566	10.394	20.565	1.00	37.12
	ATOM	791	CE1	TYR	1558	-6.683	11.456	21.479	1.00	36.44
30	ATOM	792	CD2	TYR	1558	-4.945	11.636	19.317	1.00	37.27
	ATOM	793	CE2	TYR	1558	-5.054	12.690	20.213	1.00	39.62
	ATOM	794	CZ	TYR	1558	-5.921	12.598	21.289	1.00	40.05
	ATOM	795	OH	TYR	1558	-6.008	13.668	22.155	1.00	44.98
	ATOM	797	C	TYR	1558	-4.600	8.419	16.387	1.00	31.58
	ATOM	798	O	TYR	1558	-5.532	7.750	15.936	1.00	30.22
	ATOM	799	N	VAL	1559	-3.331	8.129	16.153	1.00	33.43
	ATOM	801	CA	VAL	1559	-2.947	6.907	15.463	1.00	31.42
	ATOM	802	CB	VAL	1559	-1.849	7.160	14.419	1.00	32.31
35	ATOM	803	CG1	VAL	1559	-1.516	5.851	13.675	1.00	26.79
	ATOM	804	CG2	VAL	1559	-2.308	8.265	13.453	1.00	30.63

	ATOM	805	C	VAL	1559	-2.438	5.979	16.556	1.00	28.67
	ATOM	806	O	VAL	1559	-1.393	6.223	17.155	1.00	30.08
	ATOM	807	N	ILE	1560	-3.230	4.960	16.852	1.00	25.80
	ATOM	809	CA	ILE	1560	-2.915	3.998	17.894	1.00	25.33
	ATOM	810	CB	ILE	1560	-4.219	3.443	18.506	1.00	22.34
5	ATOM	811	CG2	ILE	1560	-3.931	2.695	19.784	1.00	20.36
	ATOM	812	CG1	ILE	1560	-5.172	4.603	18.809	1.00	21.34
	ATOM	813	CD1	ILE	1560	-6.583	4.190	19.093	1.00	20.68
	ATOM	814	C	ILE	1560	-2.073	2.857	17.341	1.00	27.16
	ATOM	815	O	ILE	1560	-2.520	2.116	16.455	1.00	29.67
	ATOM	816	N	VAL	1561	-0.858	2.714	17.860	1.00	27.69
	ATOM	818	CA	VAL	1561	0.060	1.667	17.411	1.00	28.27
	ATOM	819	CB	VAL	1561	1.311	2.269	16.696	1.00	27.34
	ATOM	820	CG1	VAL	1561	0.892	3.019	15.445	1.00	21.76
10	ATOM	821	CG2	VAL	1561	2.074	3.201	17.639	1.00	26.00
	ATOM	822	C	VAL	1561	0.509	0.809	18.588	1.00	28.70
	ATOM	823	O	VAL	1561	0.221	1.139	19.746	1.00	30.52
	ATOM	824	N	GLU	1562	1.166	-0.311	18.286	1.00	28.64
	ATOM	826	CA	GLU	1562	1.658	-1.220	19.318	1.00	27.77
	ATOM	827	CB	GLU	1562	2.278	-2.465	18.693	1.00	24.57
	ATOM	828	CG	GLU	1562	1.251	-3.452	18.208	1.00	24.76
	ATOM	829	CD	GLU	1562	1.864	-4.641	17.501	1.00	27.27
	ATOM	830	OE1	GLU	1562	1.272	-5.739	17.580	1.00	28.27
15	ATOM	831	OE2	GLU	1562	2.920	-4.487	16.849	1.00	29.25
	ATOM	832	C	GLU	1562	2.674	-0.538	20.217	1.00	28.79
	ATOM	833	O	GLU	1562	3.453	0.292	19.760	1.00	29.38
	ATOM	834	N	TYR	1563	2.627	-0.871	21.503	1.00	30.84
	ATOM	836	CA	TYR	1563	3.534	-0.304	22.493	1.00	31.43
	ATOM	837	CB	TYR	1563	2.782	-0.088	23.799	1.00	32.10
	ATOM	838	CG	TYR	1563	3.632	0.376	24.952	1.00	33.93
	ATOM	839	CD1	TYR	1563	4.366	1.552	24.873	1.00	34.85
	ATOM	840	CE1	TYR	1563	5.140	1.992	25.947	1.00	37.53
20	ATOM	841	CD2	TYR	1563	3.683	-0.356	26.136	1.00	34.81
	ATOM	842	CE2	TYR	1563	4.452	0.072	27.211	1.00	34.01
	ATOM	843	CZ	TYR	1563	5.173	1.245	27.113	1.00	35.79
	ATOM	844	OH	TYR	1563	5.920	1.677	28.184	1.00	39.10
	ATOM	846	C	TYR	1563	4.767	-1.166	22.731	1.00	31.38
	ATOM	847	O	TYR	1563	4.672	-2.385	22.905	1.00	30.73
	ATOM	848	N	ALA	1564	5.930	-0.525	22.725	1.00	32.23
	ATOM	850	CA	ALA	1564	7.198	-1.212	22.953	1.00	35.90
	ATOM	851	CB	ALA	1564	8.178	-0.866	21.833	1.00	36.44
25	ATOM	852	C	ALA	1564	7.711	-0.719	24.307	1.00	36.52
	ATOM	853	O	ALA	1564	8.332	0.349	24.403	1.00	39.16
	ATOM	854	N	SER	1565	7.424	-1.482	25.359	1.00	34.62
	ATOM	856	CA	SER	1565	7.801	-1.071	26.700	1.00	34.91
	ATOM	857	CB	SER	1565	7.124	-1.945	27.750	1.00	32.11
	ATOM	858	OG	SER	1565	7.606	-3.271	27.696	1.00	32.92
	ATOM	860	C	SER	1565	9.288	-0.968	26.996	1.00	35.56
	ATOM	861	O	SER	1565	9.674	-0.219	27.886	1.00	38.69
	ATOM	862	N	LYS	1566	10.127	-1.673	26.243	1.00	33.70
30	ATOM	864	CA	LYS	1566	11.557	-1.625	26.526	1.00	31.40
	ATOM	865	CB	LYS	1566	12.137	-3.033	26.530	1.00	30.56
	ATOM	866	CG	LYS	1566	11.555	-3.869	27.664	1.00	32.32
	ATOM	867	CD	LYS	1566	11.997	-5.308	27.599	1.00	36.47
	ATOM	868	CE	LYS	1566	11.632	-6.031	28.872	1.00	36.97
	ATOM	869	NZ	LYS	1566	12.104	-7.436	28.804	1.00	41.62
	ATOM	873	C	LYS	1566	12.380	-0.664	25.683	1.00	32.18
	ATOM	874	O	LYS	1566	13.616	-0.691	25.715	1.00	32.57
	ATOM	875	N	GLY	1567	11.686	0.223	24.973	1.00	33.39
35	ATOM	877	CA	GLY	1567	12.345	1.224	24.156	1.00	32.13
	ATOM	878	C	GLY	1567	13.074	0.719	22.928	1.00	31.70

	ATOM	879	O	GLY	1567	12.912	-0.430	22.530	1.00	33.30
	ATOM	880	N	ASN	1568	13.883	1.589	22.331	1.00	31.08
	ATOM	882	CA	ASN	1568	14.632	1.230	21.139	1.00	31.00
	ATOM	883	CB	ASN	1568	15.066	2.478	20.365	1.00	31.30
5	ATOM	884	CG	ASN	1568	16.127	3.271	21.074	1.00	30.47
	ATOM	885	OD1	ASN	1568	17.130	2.733	21.508	1.00	32.19
	ATOM	886	ND2	ASN	1568	15.934	4.580	21.144	1.00	32.13
	ATOM	889	C	ASN	1568	15.802	0.295	21.393	1.00	30.62
	ATOM	890	O	ASN	1568	16.357	0.256	22.483	1.00	32.91
	ATOM	891	N	LEU	1569	16.193	-0.428	20.354	1.00	30.92
	ATOM	893	CA	LEU	1569	17.269	-1.403	20.417	1.00	31.22
	ATOM	894	CB	LEU	1569	17.418	-2.083	19.054	1.00	29.57
	ATOM	895	CG	LEU	1569	18.415	-3.231	18.893	1.00	29.22
	ATOM	896	CD1	LEU	1569	18.284	-4.261	20.024	1.00	21.30
10	ATOM	897	CD2	LEU	1569	18.184	-3.863	17.523	1.00	24.99
	ATOM	898	C	LEU	1569	18.609	-0.838	20.878	1.00	32.44
	ATOM	899	O	LEU	1569	19.328	-1.499	21.618	1.00	33.12
	ATOM	900	N	ARG	1570	18.954	0.370	20.432	1.00	33.24
	ATOM	902	CA	ARG	1570	20.218	0.983	20.834	1.00	33.01
	ATOM	903	CB	ARG	1570	20.348	2.394	20.256	1.00	32.36
	ATOM	904	CG	ARG	1570	21.586	3.129	20.758	1.00	38.28
	ATOM	905	CD	ARG	1570	21.672	4.538	20.221	1.00	41.93
	ATOM	906	NE	ARG	1570	20.428	5.278	20.412	1.00	49.82
15	ATOM	908	CZ	ARG	1570	19.975	5.721	21.584	1.00	52.37
	ATOM	909	NH1	ARG	1570	20.659	5.510	22.712	1.00	51.61
	ATOM	912	NH2	ARG	1570	18.824	6.377	21.622	1.00	53.28
	ATOM	915	C	ARG	1570	20.308	1.023	22.371	1.00	33.90
	ATOM	916	O	ARG	1570	21.184	0.391	22.970	1.00	33.17
	ATOM	917	N	GLU	1571	19.359	1.730	22.981	1.00	33.45
	ATOM	919	CA	GLU	1571	19.284	1.861	24.432	1.00	34.87
	ATOM	920	CB	GLU	1571	18.052	2.688	24.794	1.00	35.83
	ATOM	921	CG	GLU	1571	18.158	4.145	24.354	1.00	41.61
20	ATOM	922	CD	GLU	1571	16.814	4.870	24.318	1.00	47.33
	ATOM	923	OE1	GLU	1571	15.759	4.199	24.362	1.00	50.68
	ATOM	924	OE2	GLU	1571	16.812	6.120	24.218	1.00	48.07
	ATOM	925	C	GLU	1571	19.223	0.487	25.098	1.00	34.39
	ATOM	926	O	GLU	1571	19.968	0.202	26.041	1.00	34.04
	ATOM	927	N	TYR	1572	18.363	-0.376	24.572	1.00	33.49
	ATOM	929	CA	TYR	1572	18.204	-1.728	25.083	1.00	30.45
	ATOM	930	CB	TYR	1572	17.210	-2.495	24.202	1.00	28.13
	ATOM	931	CG	TYR	1572	17.074	-3.971	24.487	1.00	25.80
25	ATOM	932	CD1	TYR	1572	16.105	-4.443	25.371	1.00	28.92
	ATOM	933	CE1	TYR	1572	15.954	-5.804	25.618	1.00	30.03
	ATOM	934	CD2	TYR	1572	17.899	-4.899	23.863	1.00	24.61
	ATOM	935	CE2	TYR	1572	17.760	-6.260	24.102	1.00	26.05
	ATOM	936	CZ	TYR	1572	16.790	-6.705	24.982	1.00	29.23
	ATOM	937	OH	TYR	1572	16.651	-8.052	25.227	1.00	33.74
	ATOM	939	C	TYR	1572	19.549	-2.447	25.113	1.00	31.30
	ATOM	940	O	TYR	1572	19.880	-3.126	26.090	1.00	32.43
	ATOM	941	N	LEU	1573	20.334	-2.266	24.058	1.00	29.68
30	ATOM	943	CA	LEU	1573	21.625	-2.923	23.972	1.00	30.04
	ATOM	944	CB	LEU	1573	22.145	-2.909	22.529	1.00	26.13
	ATOM	945	CG	LEU	1573	21.532	-3.870	21.490	1.00	25.24
	ATOM	946	CD1	LEU	1573	22.097	-3.563	20.113	1.00	19.70
	ATOM	947	CD2	LEU	1573	21.807	-5.317	21.839	1.00	22.05
	ATOM	948	C	LEU	1573	22.645	-2.308	24.927	1.00	34.47
	ATOM	949	O	LEU	1573	23.354	-3.031	25.644	1.00	34.95
	ATOM	950	N	GLN	1574	22.691	-0.980	24.978	1.00	35.47
	ATOM	952	CA	GLN	1574	23.639	-0.293	25.850	1.00	37.09
35	ATOM	953	CB	GLN	1574	23.601	1.206	25.579	1.00	36.70
	ATOM	954	CG	GLN	1574	24.033	1.559	24.171	1.00	39.77

	ATOM	955	CD	GLN	1574	23.960	3.045	23.884	1.00	41.51
	ATOM	956	OE1	GLN	1574	23.592	3.837	24.751	1.00	42.57
	ATOM	957	NE2	GLN	1574	24.288	3.431	22.652	1.00	41.34
	ATOM	960	C	GLN	1574	23.400	-0.588	27.332	1.00	37.85
5	ATOM	961	O	GLN	1574	24.343	-0.801	28.090	1.00	38.87
	ATOM	962	N	ALA	1575	22.131	-0.667	27.720	1.00	39.01
	ATOM	964	CA	ALA	1575	21.740	-0.944	29.098	1.00	37.00
	ATOM	965	CB	ALA	1575	20.261	-0.678	29.273	1.00	35.71
	ATOM	966	C	ALA	1575	22.061	-2.359	29.559	1.00	39.14
	ATOM	967	O	ALA	1575	21.839	-2.692	30.719	1.00	43.81
	ATOM	968	N	ARG	1576	22.563	-3.201	28.665	1.00	38.39
	ATOM	970	CA	ARG	1576	22.897	-4.568	29.032	1.00	37.71
	ATOM	971	CB	ARG	1576	21.994	-5.544	28.290	1.00	38.26
10	ATOM	972	CG	ARG	1576	20.555	-5.383	28.700	1.00	38.00
	ATOM	973	CD	ARG	1576	19.653	-6.282	27.920	1.00	34.74
	ATOM	974	NE	ARG	1576	18.279	-6.190	28.388	1.00	32.88
	ATOM	976	CZ	ARG	1576	17.572	-5.066	28.442	1.00	34.02
	ATOM	977	NH1	ARG	1576	18.114	-3.913	28.068	1.00	35.57
	ATOM	980	NH2	ARG	1576	16.298	-5.102	28.800	1.00	36.71
	ATOM	983	C	ARG	1576	24.365	-4.927	28.828	1.00	39.59
	ATOM	984	O	ARG	1576	24.735	-6.113	28.788	1.00	39.83
	ATOM	985	N	ARG	1577	25.200	-3.900	28.687	1.00	38.82
15	ATOM	987	CA	ARG	1577	26.631	-4.101	28.520	1.00	39.07
	ATOM	988	CB	ARG	1577	27.310	-2.797	28.090	1.00	34.91
	ATOM	989	CG	ARG	1577	27.033	-2.323	26.681	1.00	33.87
	ATOM	990	CD	ARG	1577	27.730	-0.981	26.428	1.00	33.06
	ATOM	991	NE	ARG	1577	27.722	-0.612	25.015	1.00	38.87
	ATOM	993	CZ	ARG	1577	28.174	0.538	24.517	1.00	39.76
	ATOM	994	NH1	ARG	1577	28.683	1.470	25.305	1.00	40.68
	ATOM	997	NH2	ARG	1577	28.122	0.758	23.213	1.00	43.26
	ATOM	1000	C	ARG	1577	27.181	-4.501	29.885	1.00	41.58
20	ATOM	1001	O	ARG	1577	26.586	-4.181	30.917	1.00	42.48
	ATOM	1002	N	PRO	1578	28.294	-5.249	29.919	1.00	43.07
	ATOM	1003	CD	PRO	1578	29.110	-5.812	28.823	1.00	43.36
	ATOM	1004	CA	PRO	1578	28.839	-5.626	31.223	1.00	42.69
	ATOM	1005	CB	PRO	1578	29.966	-6.595	30.857	1.00	42.22
	ATOM	1006	CG	PRO	1578	30.412	-6.103	29.516	1.00	43.64
	ATOM	1007	C	PRO	1578	29.366	-4.350	31.882	1.00	43.37
	ATOM	1008	O	PRO	1578	29.530	-3.319	31.215	1.00	42.50
	ATOM	1009	N	PRO	1579	29.596	-4.380	33.198	1.00	45.24
25	ATOM	1010	CD	PRO	1579	29.279	-5.435	34.174	1.00	44.69
	ATOM	1011	CA	PRO	1579	30.099	-3.187	33.882	1.00	46.27
	ATOM	1012	CB	PRO	1579	29.979	-3.567	35.353	1.00	45.78
	ATOM	1013	CG	PRO	1579	28.894	-4.615	35.361	1.00	46.15
	ATOM	1014	C	PRO	1579	31.548	-2.869	33.500	1.00	48.38
	ATOM	1015	O	PRO	1579	32.410	-3.753	33.478	1.00	50.64
	ATOM	1016	N	GLU	1592	19.022	-5.398	32.495	1.00	65.98
	ATOM	1018	CA	GLU	1592	20.442	-5.048	32.492	1.00	64.80
	ATOM	1019	CB	GLU	1592	20.796	-4.241	33.740	1.00	67.30
30	ATOM	1020	C	GLU	1592	21.351	-6.275	32.371	1.00	63.80
	ATOM	1021	O	GLU	1592	22.545	-6.149	32.089	1.00	65.21
	ATOM	1022	N	GLU	1593	20.789	-7.458	32.607	1.00	61.44
	ATOM	1024	CA	GLU	1593	21.560	-8.691	32.495	1.00	60.82
	ATOM	1025	CB	GLU	1593	20.681	-9.899	32.807	1.00	61.47
	ATOM	1026	C	GLU	1593	22.144	-8.803	31.089	1.00	59.12
	ATOM	1027	O	GLU	1593	21.468	-8.525	30.097	1.00	59.49
	ATOM	1028	N	GLN	1594	23.408	-9.201	31.017	1.00	57.33
	ATOM	1030	CA	GLN	1594	24.103	-9.334	29.744	1.00	55.30
	ATOM	1031	CB	GLN	1594	25.523	-9.880	29.957	1.00	54.87
35	ATOM	1032	CG	GLN	1594	26.438	-8.959	30.757	1.00	53.34
	ATOM	1033	CD	GLN	1594	27.704	-9.660	31.248	1.00	55.27

	ATOM	1034	OE1	GLN	1594	28.256	-10.536	30.572	1.00	56.47
	ATOM	1035	NE2	GLN	1594	28.166	-9.275	32.434	1.00	51.46
	ATOM	1038	C	GLN	1594	23.336	-10.229	28.781	1.00	52.29
	ATOM	1039	O	GLN	1594	22.648	-11.166	29.190	1.00	52.56
	ATOM	1040	N	LEU	1595	23.447	-9.913	27.499	1.00	49.40
5	ATOM	1042	CA	LEU	1595	22.783	-10.676	26.455	1.00	46.00
	ATOM	1043	CB	LEU	1595	22.452	-9.760	25.274	1.00	42.94
	ATOM	1044	CG	LEU	1595	21.390	-8.711	25.626	1.00	43.90
	ATOM	1045	CD1	LEU	1595	21.495	-7.484	24.743	1.00	39.46
	ATOM	1046	CD2	LEU	1595	20.005	-9.347	25.569	1.00	41.86
	ATOM	1047	C	LEU	1595	23.741	-11.762	26.029	1.00	43.96
	ATOM	1048	O	LEU	1595	24.950	-11.550	26.043	1.00	44.24
	ATOM	1049	N	SER	1596	23.217	-12.941	25.714	1.00	43.29
10	ATOM	1051	CA	SER	1596	24.076	-14.027	25.275	1.00	42.40
	ATOM	1052	CB	SER	1596	23.388	-15.374	25.484	1.00	41.83
	ATOM	1053	OG	SER	1596	22.218	-15.483	24.697	1.00	44.25
	ATOM	1055	C	SER	1596	24.392	-13.817	23.800	1.00	42.64
	ATOM	1056	O	SER	1596	23.857	-12.900	23.171	1.00	43.14
	ATOM	1057	N	SER	1597	25.277	-14.645	23.255	1.00	42.59
	ATOM	1059	CA	SER	1597	25.629	-14.553	21.850	1.00	42.91
	ATOM	1060	CB	SER	1597	26.739	-15.547	21.516	1.00	45.26
	ATOM	1061	OG	SER	1597	27.812	-15.436	22.431	1.00	56.41
15	ATOM	1063	C	SER	1597	24.380	-14.909	21.048	1.00	42.35
	ATOM	1064	O	SER	1597	24.113	-14.322	20.003	1.00	43.71
	ATOM	1065	N	LYS	1598	23.621	-15.881	21.544	1.00	40.61
	ATOM	1067	CA	LYS	1598	22.405	-16.298	20.867	1.00	38.61
	ATOM	1068	CB	LYS	1598	21.848	-17.575	21.483	1.00	36.33
	ATOM	1069	CG	LYS	1598	21.135	-18.439	20.468	1.00	40.09
	ATOM	1070	CD	LYS	1598	20.213	-19.434	21.118	1.00	43.39
	ATOM	1071	CE	LYS	1598	19.766	-20.494	20.122	1.00	48.25
	ATOM	1072	NZ	LYS	1598	20.930	-21.290	19.623	1.00	50.46
	ATOM	1076	C	LYS	1598	21.348	-15.194	20.895	1.00	38.17
20	ATOM	1077	O	LYS	1598	20.579	-15.053	19.945	1.00	41.27
	ATOM	1078	N	ASP	1599	21.321	-14.408	21.969	1.00	35.90
	ATOM	1080	CA	ASP	1599	20.366	-13.307	22.099	1.00	34.08
	ATOM	1081	CB	ASP	1599	20.450	-12.661	23.477	1.00	37.83
	ATOM	1082	CG	ASP	1599	19.822	-13.505	24.562	1.00	39.93
	ATOM	1083	OD1	ASP	1599	20.089	-13.217	25.742	1.00	45.85
	ATOM	1084	OD2	ASP	1599	19.060	-14.444	24.240	1.00	41.06
	ATOM	1085	C	ASP	1599	20.634	-12.243	21.061	1.00	32.37
	ATOM	1086	O	ASP	1599	19.704	-11.701	20.466	1.00	32.58
25	ATOM	1087	N	LEU	1600	21.915	-11.945	20.873	1.00	30.45
	ATOM	1089	CA	LEU	1600	22.355	-10.948	19.902	1.00	29.59
	ATOM	1090	CB	LEU	1600	23.841	-10.654	20.097	1.00	28.59
	ATOM	1091	CG	LEU	1600	24.238	-10.057	21.449	1.00	24.59
	ATOM	1092	CD1	LEU	1600	25.747	-9.869	21.522	1.00	18.40
	ATOM	1093	CD2	LEU	1600	23.529	-8.745	21.626	1.00	21.71
	ATOM	1094	C	LEU	1600	22.073	-11.393	18.458	1.00	28.54
	ATOM	1095	O	LEU	1600	21.578	-10.613	17.648	1.00	25.59
	ATOM	1096	N	VAL	1601	22.377	-12.645	18.134	1.00	29.13
30	ATOM	1098	CA	VAL	1601	22.111	-13.154	16.793	1.00	29.74
	ATOM	1099	CB	VAL	1601	22.780	-14.513	16.551	1.00	29.63
	ATOM	1100	CG1	VAL	1601	22.615	-14.922	15.105	1.00	29.30
	ATOM	1101	CG2	VAL	1601	24.259	-14.422	16.873	1.00	28.52
	ATOM	1102	C	VAL	1601	20.591	-13.247	16.564	1.00	29.98
	ATOM	1103	O	VAL	1601	20.106	-13.040	15.452	1.00	29.73
	ATOM	1104	N	SER	1602	19.855	-13.493	17.645	1.00	30.97
	ATOM	1106	CA	SER	1602	18.399	-13.576	17.607	1.00	29.64
	ATOM	1107	CB	SER	1602	17.894	-14.141	18.925	1.00	30.45
35	ATOM	1108	OG	SER	1602	16.483	-14.158	18.962	1.00	39.63
	ATOM	1110	C	SER	1602	17.784	-12.192	17.343	1.00	29.30

	ATOM	1111	O	SER	1602	16.772	-12.071	16.641	1.00	28.74	
	ATOM	1112	N	CYS	1603	18.385	-11.157	17.925	1.00	27.68	
	ATOM	1114	CA	CYS	1603	17.931	-9.783	17.717	1.00	27.32	
	ATOM	1115	CB	CYS	1603	18.791	-8.790	18.516	1.00	25.40	
	ATOM	1116	SG	CYS	1603	18.472	-7.039	18.177	0.50	20.76	PRT1
5	ATOM	1117	C	CYS	1603	18.057	-9.468	16.225	1.00	28.34	
	ATOM	1118	O	CYS	1603	17.134	-8.926	15.629	1.00	29.70	
	ATOM	1119	N	ALA	1604	19.192	-9.837	15.627	1.00	29.36	
	ATOM	1121	CA	ALA	1604	19.438	-9.601	14.195	1.00	28.78	
	ATOM	1122	CB	ALA	1604	20.861	-10.066	13.808	1.00	22.61	
	ATOM	1123	C	ALA	1604	18.386	-10.304	13.324	1.00	30.14	
	ATOM	1124	O	ALA	1604	17.792	-9.690	12.426	1.00	31.64	
	ATOM	1125	N	TYR	1605	18.156	-11.587	13.605	1.00	29.84	
10	ATOM	1127	CA	TYR	1605	17.179	-12.392	12.874	1.00	28.26	
	ATOM	1128	CB	TYR	1605	17.107	-13.789	13.488	1.00	28.74	
	ATOM	1129	CG	TYR	1605	16.018	-14.673	12.912	1.00	31.12	
	ATOM	1130	CD1	TYR	1605	16.152	-15.256	11.650	1.00	32.53	
	ATOM	1131	CE1	TYR	1605	15.144	-16.067	11.121	1.00	30.84	
	ATOM	1132	CD2	TYR	1605	14.853	-14.926	13.634	1.00	31.21	
	ATOM	1133	CE2	TYR	1605	13.850	-15.734	13.116	1.00	29.69	
	ATOM	1134	CZ	TYR	1605	14.002	-16.296	11.864	1.00	30.82	
	ATOM	1135	OH	TYR	1605	12.990	-17.069	11.359	1.00	33.77	
	ATOM	1137	C	TYR	1605	15.788	-11.758	12.853	1.00	27.33	
15	ATOM	1138	O	TYR	1605	15.152	-11.691	11.805	1.00	27.94	
	ATOM	1139	N	GLN	1606	15.323	-11.292	14.007	1.00	27.93	
	ATOM	1141	CA	GLN	1606	14.008	-10.659	14.115	1.00	27.20	
	ATOM	1142	CB	GLN	1606	13.686	-10.335	15.570	1.00	26.40	
	ATOM	1143	CG	GLN	1606	13.301	-11.556	16.402	1.00	28.12	
	ATOM	1144	CD	GLN	1606	13.114	-11.215	17.865	1.00	30.41	
	ATOM	1145	OE1	GLN	1606	12.188	-10.489	18.234	1.00	34.34	
	ATOM	1146	NE2	GLN	1606	14.008	-11.701	18.700	1.00	31.44	
	ATOM	1149	C	GLN	1606	13.906	-9.397	13.275	1.00	29.67	
20	ATOM	1150	O	GLN	1606	12.884	-9.148	12.622	1.00	30.74	
	ATOM	1151	N	VAL	1607	14.970	-8.602	13.281	1.00	29.59	
	ATOM	1153	CA	VAL	1607	14.996	-7.377	12.501	1.00	27.00	
	ATOM	1154	CB	VAL	1607	16.235	-6.544	12.842	1.00	27.20	
	ATOM	1155	CG1	VAL	1607	16.382	-5.397	11.859	1.00	28.11	
	ATOM	1156	CG2	VAL	1607	16.113	-5.996	14.266	1.00	24.79	
	ATOM	1157	C	VAL	1607	14.966	-7.725	11.014	1.00	28.02	
	ATOM	1158	O	VAL	1607	14.229	-7.108	10.241	1.00	28.28	
	ATOM	1159	N	ALA	1608	15.736	-8.741	10.626	1.00	27.56	
25	ATOM	1161	CA	ALA	1608	15.787	-9.206	9.236	1.00	27.36	
	ATOM	1162	CB	ALA	1608	16.801	-10.339	9.095	1.00	26.25	
	ATOM	1163	C	ALA	1608	14.402	-9.674	8.779	1.00	28.58	
	ATOM	1164	O	ALA	1608	14.013	-9.446	7.624	1.00	29.11	
	ATOM	1165	N	ARG	1609	13.660	-10.326	9.680	1.00	28.88	
	ATOM	1167	CA	ARG	1609	12.306	-10.797	9.376	1.00	27.17	
	ATOM	1168	CB	ARG	1609	11.797	-11.731	10.464	1.00	29.68	
	ATOM	1169	CG	ARG	1609	12.458	-13.062	10.439	1.00	31.65	
	ATOM	1170	CD	ARG	1609	11.612	-14.049	11.177	1.00	38.21	
30	ATOM	1171	NE	ARG	1609	10.856	-14.897	10.269	1.00	41.10	
	ATOM	1173	CZ	ARG	1609	10.048	-15.872	10.667	1.00	41.97	
	ATOM	1174	NH1	ARG	1609	9.886	-16.125	11.959	1.00	40.69	
	ATOM	1177	NH2	ARG	1609	9.411	-16.609	9.770	1.00	43.57	
	ATOM	1180	C	ARG	1609	11.312	-9.654	9.183	1.00	25.38	
	ATOM	1181	O	ARG	1609	10.480	-9.693	8.260	1.00	25.75	
	ATOM	1182	N	GLY	1610	11.365	-8.661	10.070	1.00	24.03	
	ATOM	1184	CA	GLY	1610	10.480	-7.517	9.939	1.00	21.74	
	ATOM	1185	C	GLY	1610	10.734	-6.864	8.592	1.00	23.32	
35	ATOM	1186	O	GLY	1610	9.805	-6.540	7.850	1.00	23.39	
	ATOM	1187	N	MET	1611	12.016	-6.714	8.265	1.00	24.48	

	ATOM	1189	CA	MET	1611	12.453	-6.125	7.002	1.00	23.13
	ATOM	1190	CB	MET	1611	13.949	-5.860	7.035	1.00	19.46
	ATOM	1191	CG	MET	1611	14.339	-4.671	7.910	1.00	22.46
	ATOM	1192	SD	MET	1611	13.457	-3.123	7.536	1.00	25.27
5	ATOM	1193	CE	MET	1611	13.900	-2.801	5.876	1.00	22.25
	ATOM	1194	C	MET	1611	12.100	-7.005	5.811	1.00	24.87
	ATOM	1195	O	MET	1611	11.699	-6.497	4.755	1.00	24.09
	ATOM	1196	N	GLU	1612	12.230	-8.321	5.975	1.00	25.48
	ATOM	1198	CA	GLU	1612	11.894	-9.232	4.890	1.00	25.42
	ATOM	1199	CB	GLU	1612	12.155	-10.691	5.288	1.00	23.41
	ATOM	1200	CG	GLU	1612	11.664	-11.679	4.232	1.00	25.14
	ATOM	1201	CD	GLU	1612	11.872	-13.141	4.599	1.00	28.60
	ATOM	1202	OE1	GLU	1612	11.637	-13.514	5.777	1.00	30.10
10	ATOM	1203	OE2	GLU	1612	12.244	-13.928	3.694	1.00	29.53
	ATOM	1204	C	GLU	1612	10.418	-9.021	4.521	1.00	26.92
	ATOM	1205	O	GLU	1612	10.065	-8.928	3.343	1.00	29.61
	ATOM	1206	N	TYR	1613	9.576	-8.884	5.542	1.00	27.88
	ATOM	1208	CA	TYR	1613	8.154	-8.675	5.337	1.00	23.82
	ATOM	1209	CB	TYR	1613	7.415	-8.769	6.667	1.00	24.17
	ATOM	1210	CG	TYR	1613	5.941	-8.492	6.545	1.00	23.73
	ATOM	1211	CD1	TYR	1613	5.064	-9.483	6.096	1.00	22.17
	ATOM	1212	CE1	TYR	1613	3.698	-9.235	5.965	1.00	21.08
	ATOM	1213	CD2	TYR	1613	5.419	-7.237	6.865	1.00	23.16
15	ATOM	1214	CE2	TYR	1613	4.054	-6.976	6.736	1.00	26.38
	ATOM	1215	CZ	TYR	1613	3.200	-7.981	6.287	1.00	23.16
	ATOM	1216	OH	TYR	1613	1.855	-7.725	6.149	1.00	25.50
	ATOM	1218	C	TYR	1613	7.885	-7.327	4.670	1.00	23.17
	ATOM	1219	O	TYR	1613	7.147	-7.246	3.689	1.00	24.21
	ATOM	1220	N	LEU	1614	8.481	-6.266	5.206	1.00	23.04
	ATOM	1222	CA	LEU	1614	8.316	-4.920	4.652	1.00	21.81
	ATOM	1223	CB	LEU	1614	9.107	-3.906	5.484	1.00	19.94
	ATOM	1224	CG	LEU	1614	8.609	-3.616	6.902	1.00	21.94
20	ATOM	1225	CD1	LEU	1614	9.580	-2.719	7.654	1.00	14.28
	ATOM	1226	CD2	LEU	1614	7.227	-2.977	6.814	1.00	17.45
	ATOM	1227	C	LEU	1614	8.764	-4.858	3.182	1.00	23.74
	ATOM	1228	O	LEU	1614	8.169	-4.150	2.367	1.00	25.26
	ATOM	1229	N	ALA	1615	9.831	-5.587	2.862	1.00	25.00
	ATOM	1231	CA	ALA	1615	10.357	-5.644	1.502	1.00	23.04
	ATOM	1232	CB	ALA	1615	11.710	-6.360	1.483	1.00	20.02
	ATOM	1233	C	ALA	1615	9.351	-6.357	0.605	1.00	23.15
	ATOM	1234	O	ALA	1615	9.076	-5.891	-0.503	1.00	25.25
25	ATOM	1235	N	SER	1616	8.754	-7.441	1.104	1.00	23.64
	ATOM	1237	CA	SER	1616	7.758	-8.199	0.337	1.00	23.60
	ATOM	1238	CB	SER	1616	7.346	-9.453	1.107	1.00	22.46
	ATOM	1239	OG	SER	1616	6.531	-9.131	2.224	1.00	26.66
	ATOM	1241	C	SER	1616	6.505	-7.369	0.025	1.00	25.45
	ATOM	1242	O	SER	1616	5.813	-7.607	-0.967	1.00	26.67
	ATOM	1243	N	LYS	1617	6.193	-6.436	0.916	1.00	25.47
	ATOM	1245	CA	LYS	1617	5.051	-5.551	0.781	1.00	25.04
	ATOM	1246	CB	LYS	1617	4.513	-5.183	2.163	1.00	26.30
30	ATOM	1247	CG	LYS	1617	3.778	-6.318	2.851	1.00	28.58
	ATOM	1248	CD	LYS	1617	2.438	-6.530	2.169	1.00	33.00
	ATOM	1249	CE	LYS	1617	1.652	-7.676	2.764	1.00	38.57
	ATOM	1250	NZ	LYS	1617	2.167	-8.987	2.300	1.00	45.15
	ATOM	1254	C	LYS	1617	5.417	-4.293	0.002	1.00	26.34
	ATOM	1255	O	LYS	1617	4.649	-3.336	-0.034	1.00	26.77
	ATOM	1256	N	LYS	1618	6.592	-4.319	-0.632	1.00	27.17
	ATOM	1258	CA	LYS	1618	7.084	-3.197	-1.447	1.00	28.20
	ATOM	1259	CB	LYS	1618	6.053	-2.819	-2.528	1.00	28.42
35	ATOM	1260	CG	LYS	1618	5.971	-3.749	-3.730	1.00	26.63
	ATOM	1261	CD	LYS	1618	5.573	-5.163	-3.364	1.00	30.45

	ATOM	1262	CE	LYS	1618	5.636	-6.087	-4.570	1.00	32.50
	ATOM	1263	NZ	LYS	1618	4.621	-5.729	-5.600	1.00	34.89
	ATOM	1267	C	LYS	1618	7.466	-1.951	-0.643	1.00	28.78
	ATOM	1268	O	LYS	1618	7.556	-0.848	-1.199	1.00	28.78
	ATOM	1269	N	CYS	1619	7.753	-2.130	0.646	1.00	29.26
5	ATOM	1271	CA	CYS	1619	8.111	-1.022	1.522	1.00	28.32
	ATOM	1272	CB	CYS	1619	7.391	-1.173	2.873	1.00	26.33
	ATOM	1273	SG	CYS	1619	7.754	0.105	4.136	1.00	27.82
	ATOM	1274	C	CYS	1619	9.622	-0.841	1.728	1.00	29.15
	ATOM	1275	O	CYS	1619	10.336	-1.786	2.072	1.00	29.55
	ATOM	1276	N	ILE	1620	10.096	0.378	1.457	1.00	29.39
	ATOM	1278	CA	ILE	1620	11.502	0.761	1.625	1.00	27.44
	ATOM	1279	CB	ILE	1620	12.030	1.543	0.381	1.00	25.37
	ATOM	1280	CG2	ILE	1620	13.521	1.806	0.506	1.00	19.80
10	ATOM	1281	CG1	ILE	1620	11.767	0.764	-0.913	1.00	25.40
	ATOM	1282	CD1	ILE	1620	12.100	1.557	-2.164	1.00	27.51
	ATOM	1283	C	ILE	1620	11.553	1.686	2.855	1.00	26.56
	ATOM	1284	O	ILE	1620	11.011	2.792	2.833	1.00	26.68
	ATOM	1285	N	HIS	1621	12.193	1.210	3.916	1.00	26.31
	ATOM	1287	CA	HIS	1621	12.297	1.967	5.162	1.00	25.00
	ATOM	1288	CB	HIS	1621	13.081	1.174	6.210	1.00	23.08
	ATOM	1289	CG	HIS	1621	12.848	1.633	7.618	1.00	23.21
	ATOM	1290	CD2	HIS	1621	12.224	1.027	8.656	1.00	22.69
15	ATOM	1291	ND1	HIS	1621	13.260	2.862	8.088	1.00	25.34
	ATOM	1293	CE1	HIS	1621	12.909	2.993	9.356	1.00	24.18
	ATOM	1294	NE2	HIS	1621	12.273	1.891	9.719	1.00	25.86
	ATOM	1296	C	HIS	1621	12.963	3.316	4.976	1.00	25.09
	ATOM	1297	O	HIS	1621	12.408	4.328	5.349	1.00	28.21
	ATOM	1298	N	ARG	1622	14.162	3.315	4.402	1.00	26.09
	ATOM	1300	CA	ARG	1622	14.976	4.520	4.183	1.00	26.50
	ATOM	1301	CB	ARG	1622	14.180	5.670	3.558	1.00	23.52
	ATOM	1302	CG	ARG	1622	13.673	5.326	2.202	1.00	23.81
20	ATOM	1303	CD	ARG	1622	12.995	6.494	1.551	1.00	28.42
	ATOM	1304	NE	ARG	1622	12.677	6.170	0.180	1.00	32.52
	ATOM	1306	CZ	ARG	1622	11.623	5.455	-0.197	1.00	32.34
	ATOM	1307	NH1	ARG	1622	10.774	4.994	0.711	1.00	30.07
	ATOM	1310	NH2	ARG	1622	11.460	5.138	-1.489	1.00	28.30
	ATOM	1313	C	ARG	1622	15.740	4.993	5.423	1.00	26.31
	ATOM	1314	O	ARG	1622	16.698	5.757	5.313	1.00	26.19
	ATOM	1315	N	ASP	1623	15.379	4.495	6.596	1.00	27.41
	ATOM	1317	CA	ASP	1623	16.114	4.879	7.788	1.00	29.94
25	ATOM	1318	CB	ASP	1623	15.562	6.155	8.430	1.00	34.83
	ATOM	1319	CG	ASP	1623	16.481	6.689	9.533	1.00	38.84
	ATOM	1320	OD1	ASP	1623	15.971	7.265	10.514	1.00	44.51
	ATOM	1321	OD2	ASP	1623	17.721	6.514	9.423	1.00	37.59
	ATOM	1322	C	ASP	1623	16.203	3.763	8.812	1.00	28.71
	ATOM	1323	O	ASP	1623	15.845	3.927	9.990	1.00	26.21
	ATOM	1324	N	LEU	1624	16.735	2.633	8.357	1.00	26.82
	ATOM	1326	CA	LEU	1624	16.905	1.469	9.216	1.00	25.91
	ATOM	1327	CB	LEU	1624	17.025	0.209	8.367	1.00	23.35
30	ATOM	1328	CG	LEU	1624	17.089	-1.107	9.127	1.00	21.09
	ATOM	1329	CD1	LEU	1624	15.824	-1.303	10.009	1.00	14.44
	ATOM	1330	CD2	LEU	1624	17.282	-2.215	8.101	1.00	18.30
	ATOM	1331	C	LEU	1624	18.136	1.640	10.105	1.00	24.93
	ATOM	1332	O	LEU	1624	19.235	1.897	9.611	1.00	25.58
	ATOM	1333	N	ALA	1625	17.912	1.557	11.416	1.00	26.30
	ATOM	1335	CA	ALA	1625	18.945	1.702	12.445	1.00	23.59
	ATOM	1336	CB	ALA	1625	19.271	3.174	12.654	1.00	15.82
	ATOM	1337	C	ALA	1625	18.351	1.116	13.732	1.00	23.64
35	ATOM	1338	O	ALA	1625	17.135	0.928	13.825	1.00	26.66
	ATOM	1339	N	ALA	1626	19.197	0.815	14.712	1.00	21.59

	ATOM	1341	CA	ALA	1626	18.708	0.266	15.974	1.00	21.66
	ATOM	1342	CB	ALA	1626	19.860	-0.179	16.838	1.00	22.97
	ATOM	1343	C	ALA	1626	17.835	1.272	16.731	1.00	24.98
	ATOM	1344	O	ALA	1626	17.072	0.891	17.620	1.00	26.84
5	ATOM	1345	N	ARG	1627	17.978	2.558	16.409	1.00	24.55
	ATOM	1347	CA	ARG	1627	17.178	3.598	17.042	1.00	25.29
	ATOM	1348	CB	ARG	1627	17.699	4.983	16.673	1.00	26.66
	ATOM	1349	CG	ARG	1627	17.675	5.276	15.179	1.00	30.56
	ATOM	1350	CD	ARG	1627	18.033	6.715	14.902	1.00	34.97
	ATOM	1351	NE	ARG	1627	18.177	6.980	13.470	1.00	40.03
	ATOM	1353	CZ	ARG	1627	19.322	6.864	12.809	1.00	40.62
	ATOM	1354	NH1	ARG	1627	20.421	6.485	13.441	1.00	46.52
	ATOM	1357	NH2	ARG	1627	19.377	7.159	11.523	1.00	43.25
10	ATOM	1360	C	ARG	1627	15.739	3.472	16.542	1.00	27.33
	ATOM	1361	O	ARG	1627	14.804	3.895	17.210	1.00	28.14
	ATOM	1362	N	ASN	1628	15.576	2.894	15.353	1.00	27.46
	ATOM	1364	CA	ASN	1628	14.260	2.716	14.757	1.00	28.07
	ATOM	1365	CB	ASN	1628	14.254	3.178	13.304	1.00	31.54
	ATOM	1366	CG	ASN	1628	14.307	4.690	13.172	1.00	35.35
	ATOM	1367	OD1	ASN	1628	13.538	5.405	13.824	1.00	37.63
	ATOM	1368	ND2	ASN	1628	15.221	5.184	12.354	1.00	32.95
	ATOM	1371	C	ASN	1628	13.733	1.301	14.880	1.00	27.69
	ATOM	1372	O	ASN	1628	12.896	0.864	14.082	1.00	28.10
15	ATOM	1373	N	VAL	1629	14.247	0.580	15.870	1.00	26.21
	ATOM	1375	CA	VAL	1629	13.817	-0.775	16.169	1.00	25.90
	ATOM	1376	CB	VAL	1629	14.926	-1.812	15.946	1.00	24.73
	ATOM	1377	CG1	VAL	1629	14.480	-3.151	16.499	1.00	19.90
	ATOM	1378	CG2	VAL	1629	15.274	-1.924	14.440	1.00	18.28
	ATOM	1379	C	VAL	1629	13.470	-0.732	17.646	1.00	27.81
	ATOM	1380	O	VAL	1629	14.313	-0.404	18.468	1.00	29.18
	ATOM	1381	N	LEU	1630	12.212	-0.987	17.976	1.00	30.36
	ATOM	1383	CA	LEU	1630	11.776	-0.950	19.365	1.00	31.04
20	ATOM	1384	CB	LEU	1630	10.471	-0.151	19.489	1.00	31.93
	ATOM	1385	CG	LEU	1630	10.441	1.211	18.784	1.00	27.43
	ATOM	1386	CD1	LEU	1630	9.126	1.879	19.009	1.00	23.21
	ATOM	1387	CD2	LEU	1630	11.564	2.093	19.271	1.00	28.21
	ATOM	1388	C	LEU	1630	11.625	-2.356	19.935	1.00	31.58
	ATOM	1389	O	LEU	1630	11.415	-3.321	19.195	1.00	33.03
	ATOM	1390	N	VAL	1631	11.752	-2.467	21.253	1.00	31.30
	ATOM	1392	CA	VAL	1631	11.660	-3.749	21.937	1.00	30.60
	ATOM	1393	CB	VAL	1631	12.964	-4.027	22.745	1.00	29.35
25	ATOM	1394	CG1	VAL	1631	12.995	-5.469	23.243	1.00	23.92
	ATOM	1395	CG2	VAL	1631	14.197	-3.714	21.895	1.00	24.26
	ATOM	1396	C	VAL	1631	10.450	-3.773	22.885	1.00	32.64
	ATOM	1397	O	VAL	1631	10.198	-2.821	23.643	1.00	33.01
	ATOM	1398	N	THR	1632	9.697	-4.863	22.827	1.00	34.45
	ATOM	1400	CA	THR	1632	8.516	-5.035	23.660	1.00	34.29
	ATOM	1401	CB	THR	1632	7.466	-5.941	22.962	1.00	34.62
	ATOM	1402	OG1	THR	1632	7.965	-7.288	22.881	1.00	34.40
	ATOM	1404	CG2	THR	1632	7.154	-5.414	21.551	1.00	31.61
30	ATOM	1405	C	THR	1632	8.896	-5.678	24.989	1.00	35.41
	ATOM	1406	O	THR	1632	10.002	-6.189	25.146	1.00	34.79
	ATOM	1407	N	GLU	1633	7.939	-5.706	25.913	1.00	36.86
	ATOM	1409	CA	GLU	1633	8.156	-6.298	27.224	1.00	37.27
	ATOM	1410	CB	GLU	1633	6.893	-6.182	28.079	1.00	37.66
	ATOM	1411	CG	GLU	1633	7.031	-6.718	29.514	1.00	44.43
	ATOM	1412	CD	GLU	1633	8.048	-5.959	30.378	1.00	46.68
	ATOM	1413	OE1	GLU	1633	8.104	-4.708	30.300	1.00	49.88
	ATOM	1414	OE2	GLU	1633	8.783	-6.612	31.156	1.00	48.53
35	ATOM	1415	C	GLU	1633	8.561	-7.753	27.088	1.00	37.15
	ATOM	1416	O	GLU	1633	9.227	-8.292	27.954	1.00	38.60

	ATOM	1417	N	ASP	1634	8.167	-8.384	25.990	1.00	38.41
	ATOM	1419	CA	ASP	1634	8.505	-9.787	25.770	1.00	38.86
	ATOM	1420	CB	ASP	1634	7.381	-10.499	25.013	1.00	44.27
	ATOM	1421	CG	ASP	1634	6.022	-10.349	25.690	1.00	50.18
	ATOM	1422	OD1	ASP	1634	5.726	-11.141	26.617	1.00	52.07
5	ATOM	1423	OD2	ASP	1634	5.253	-9.439	25.295	1.00	50.17
	ATOM	1424	C	ASP	1634	9.804	-9.947	25.007	1.00	36.23
	ATOM	1425	O	ASP	1634	10.141	-11.049	24.608	1.00	35.82
	ATOM	1426	N	ASN	1635	10.528	-8.851	24.799	1.00	36.51
	ATOM	1428	CA	ASN	1635	11.795	-8.864	24.052	1.00	37.41
	ATOM	1429	CB	ASN	1635	12.801	-9.842	24.678	1.00	38.49
	ATOM	1430	CG	ASN	1635	13.343	-9.359	26.003	1.00	37.71
	ATOM	1431	OD1	ASN	1635	13.499	-8.156	26.227	1.00	38.09
	ATOM	1432	ND2	ASN	1635	13.679	-10.300	26.874	1.00	39.63
10	ATOM	1435	C	ASN	1635	11.655	-9.162	22.552	1.00	36.37
	ATOM	1436	O	ASN	1635	12.522	-9.811	21.944	1.00	36.41
	ATOM	1437	N	VAL	1636	10.547	-8.721	21.966	1.00	33.79
	ATOM	1439	CA	VAL	1636	10.315	-8.910	20.543	1.00	30.59
	ATOM	1440	CB	VAL	1636	8.820	-9.139	20.218	1.00	28.83
	ATOM	1441	CG1	VAL	1636	8.615	-9.182	18.712	1.00	26.13
	ATOM	1442	CG2	VAL	1636	8.339	-10.431	20.838	1.00	25.67
	ATOM	1443	C	VAL	1636	10.782	-7.630	19.863	1.00	30.18
	ATOM	1444	O	VAL	1636	10.436	-6.527	20.301	1.00	27.86
15	ATOM	1445	N	MET	1637	11.609	-7.792	18.832	1.00	30.93
	ATOM	1447	CA	MET	1637	12.140	-6.679	18.060	1.00	28.34
	ATOM	1448	CB	MET	1637	13.397	-7.138	17.330	1.00	30.84
	ATOM	1449	CG	MET	1637	14.480	-7.693	18.254	1.00	30.73
	ATOM	1450	SD	MET	1637	15.050	-6.490	19.477	1.00	32.20
	ATOM	1451	CE	MET	1637	15.074	-7.500	20.938	1.00	28.71
	ATOM	1452	C	MET	1637	11.082	-6.264	17.051	1.00	27.29
	ATOM	1453	O	MET	1637	10.587	-7.099	16.297	1.00	27.32
	ATOM	1454	N	LYS	1638	10.733	-4.983	17.045	1.00	27.19
20	ATOM	1456	CA	LYS	1638	9.716	-4.450	16.143	1.00	26.38
	ATOM	1457	CB	LYS	1638	8.437	-4.120	16.912	1.00	27.09
	ATOM	1458	CG	LYS	1638	7.702	-5.351	17.407	1.00	29.71
	ATOM	1459	CD	LYS	1638	6.386	-5.018	18.109	1.00	31.48
	ATOM	1460	CE	LYS	1638	5.485	-6.263	18.202	1.00	27.09
	ATOM	1461	NZ	LYS	1638	4.888	-6.561	16.869	1.00	26.68
	ATOM	1465	C	LYS	1638	10.196	-3.208	15.416	1.00	26.56
	ATOM	1466	O	LYS	1638	10.514	-2.194	16.040	1.00	27.40
	ATOM	1467	N	ILE	1639	10.211	-3.271	14.092	1.00	24.31
25	ATOM	1469	CA	ILE	1639	10.649	-2.147	13.289	1.00	24.84
	ATOM	1470	CB	ILE	1639	10.924	-2.588	11.836	1.00	25.81
	ATOM	1471	CG2	ILE	1639	11.248	-1.395	10.952	1.00	24.18
	ATOM	1472	CG1	ILE	1639	12.094	-3.566	11.826	1.00	25.01
	ATOM	1473	CD1	ILE	1639	12.075	-4.499	10.675	1.00	27.90
	ATOM	1474	C	ILE	1639	9.641	-0.999	13.348	1.00	24.90
	ATOM	1475	O	ILE	1639	8.435	-1.186	13.170	1.00	25.24
	ATOM	1476	N	ALA	1640	10.167	0.183	13.635	1.00	25.70
	ATOM	1478	CA	ALA	1640	9.378	1.392	13.744	1.00	27.61
30	ATOM	1479	CB	ALA	1640	9.699	2.094	15.070	1.00	26.37
	ATOM	1480	C	ALA	1640	9.637	2.348	12.576	1.00	28.35
	ATOM	1481	O	ALA	1640	10.650	2.243	11.871	1.00	28.40
	ATOM	1482	N	ASP	1641	8.676	3.237	12.354	1.00	29.74
	ATOM	1484	CA	ASP	1641	8.760	4.272	11.325	1.00	32.13
	ATOM	1485	CB	ASP	1641	9.873	5.273	11.688	1.00	34.31
	ATOM	1486	CG	ASP	1641	9.507	6.158	12.896	1.00	36.31
	ATOM	1487	OD1	ASP	1641	10.299	7.056	13.258	1.00	42.18
	ATOM	1488	OD2	ASP	1641	8.420	5.974	13.483	1.00	41.03
35	ATOM	1489	C	ASP	1641	8.882	3.840	9.867	1.00	32.00
	ATOM	1490	O	ASP	1641	9.339	4.617	9.021	1.00	32.65

	ATOM	1491	N	PHE	1642	8.415	2.634	9.563	1.00	30.61
	ATOM	1493	CA	PHE	1642	8.473	2.119	8.200	1.00	30.06
	ATOM	1494	CB	PHE	1642	8.248	0.606	8.189	1.00	24.46
	ATOM	1495	CG	PHE	1642	6.981	0.176	8.854	1.00	23.26
	ATOM	1496	CD1	PHE	1642	5.799	0.075	8.125	1.00	19.66
5	ATOM	1497	CD2	PHE	1642	6.966	-0.134	10.209	1.00	22.88
	ATOM	1498	CE1	PHE	1642	4.609	-0.331	8.734	1.00	20.97
	ATOM	1499	CE2	PHE	1642	5.785	-0.540	10.830	1.00	26.61
	ATOM	1500	CZ	PHE	1642	4.599	-0.639	10.083	1.00	24.82
	ATOM	1501	C	PHE	1642	7.512	2.830	7.225	1.00	33.14
	ATOM	1502	O	PHE	1642	7.791	2.922	6.029	1.00	36.48
	ATOM	1503	N	GLY	1643	6.411	3.372	7.741	1.00	32.65
	ATOM	1505	CA	GLY	1643	5.462	4.059	6.876	1.00	32.28
	ATOM	1506	C	GLY	1643	5.629	5.560	6.913	1.00	32.19
10	ATOM	1507	O	GLY	1643	4.795	6.310	6.415	1.00	30.74
	ATOM	1508	N	LEU	1644	6.739	5.997	7.486	1.00	36.80
	ATOM	1510	CA	LEU	1644	7.052	7.406	7.630	1.00	41.95
	ATOM	1511	CB	LEU	1644	8.332	7.551	8.439	1.00	37.41
	ATOM	1512	CG	LEU	1644	8.377	8.746	9.369	1.00	38.98
	ATOM	1513	CD1	LEU	1644	7.384	8.548	10.493	1.00	40.45
	ATOM	1514	CD2	LEU	1644	9.775	8.904	9.929	1.00	41.94
	ATOM	1515	C	LEU	1644	7.189	8.150	6.296	1.00	47.55
	ATOM	1516	O	LEU	1644	7.787	7.648	5.341	1.00	50.55
15	ATOM	1517	N	ALA	1645	6.637	9.356	6.247	1.00	52.59
	ATOM	1519	CA	ALA	1645	6.686	10.194	5.055	1.00	56.88
	ATOM	1520	CB	ALA	1645	5.391	10.999	4.942	1.00	58.01
	ATOM	1521	C	ALA	1645	7.880	11.135	5.178	1.00	58.95
	ATOM	1522	O	ALA	1645	8.064	11.770	6.224	1.00	59.37
	ATOM	1523	N	ARG	1646	8.700	11.211	4.133	1.00	60.26
	ATOM	1525	CA	ARG	1646	9.870	12.088	4.165	1.00	63.04
	ATOM	1526	CB	ARG	1646	10.995	11.444	4.976	1.00	64.92
	ATOM	1527	C	ARG	1646	10.377	12.461	2.782	1.00	63.84
20	ATOM	1528	O	ARG	1646	10.361	11.641	1.864	1.00	63.55
	ATOM	1529	N	ASP	1647	10.801	13.714	2.633	1.00	65.18
	ATOM	1531	CA	ASP	1647	11.332	14.190	1.361	1.00	67.26
	ATOM	1532	CB	ASP	1647	10.989	15.670	1.150	1.00	68.92
	ATOM	1533	CG	ASP	1647	11.164	16.124	-0.304	1.00	70.88
	ATOM	1534	OD1	ASP	1647	12.196	15.811	-0.943	1.00	70.33
	ATOM	1535	OD2	ASP	1647	10.258	16.825	-0.808	1.00	71.39
	ATOM	1536	C	ASP	1647	12.847	14.005	1.405	1.00	68.40
	ATOM	1537	O	ASP	1647	13.545	14.711	2.142	1.00	68.66
25	ATOM	1538	N	ILE	1648	13.347	13.055	0.621	1.00	68.48
	ATOM	1540	CA	ILE	1648	14.777	12.773	0.570	1.00	69.00
	ATOM	1541	CB	ILE	1648	15.091	11.535	-0.314	1.00	66.28
	ATOM	1542	CG2	ILE	1648	14.231	10.352	0.131	1.00	65.14
	ATOM	1543	CG1	ILE	1648	14.869	11.853	-1.799	1.00	63.01
	ATOM	1544	CD1	ILE	1648	15.274	10.746	-2.738	1.00	60.11
	ATOM	1545	C	ILE	1648	15.542	13.990	0.046	1.00	71.12
	ATOM	1546	O	ILE	1648	16.628	14.310	0.525	1.00	72.41
	ATOM	1547	N	HIS	1649	14.923	14.710	-0.883	1.00	73.09
30	ATOM	1549	CA	HIS	1649	15.546	15.890	-1.469	1.00	74.66
	ATOM	1550	CB	HIS	1649	14.921	16.191	-2.835	1.00	76.00
	ATOM	1551	CG	HIS	1649	15.178	15.157	-3.867	1.00	78.03
	ATOM	1552	CD2	HIS	1649	16.314	14.425	-4.151	1.00	78.85
	ATOM	1553	ND1	HIS	1649	14.245	14.739	-4.795	1.00	78.49
	ATOM	1555	CE1	HIS	1649	14.765	13.835	-5.584	1.00	78.94
	ATOM	1556	NE2	HIS	1649	16.005	13.623	-5.226	1.00	78.22
	ATOM	1558	C	HIS	1649	15.466	17.108	-0.549	1.00	75.04
	ATOM	1559	O	HIS	1649	15.567	18.244	-1.007	1.00	75.49
35	ATOM	1560	N	HIS	1650	15.265	16.860	0.743	1.00	76.11
	ATOM	1562	CA	HIS	1650	15.181	17.918	1.748	1.00	77.63

	ATOM	1563	CB	HIS	1650	13.723	18.327	1.995	1.00	81.10
	ATOM	1564	CG	HIS	1650	13.206	19.352	1.033	1.00	86.06
	ATOM	1565	CD2	HIS	1650	13.662	20.592	0.730	1.00	88.74
	ATOM	1566	ND1	HIS	1650	12.099	19.146	0.239	1.00	88.83
	ATOM	1568	CE1	HIS	1650	11.893	20.211	-0.511	1.00	90.51
5	ATOM	1569	NE2	HIS	1650	12.823	21.103	-0.238	1.00	90.75
	ATOM	1571	C	HIS	1650	15.824	17.482	3.064	1.00	77.39
	ATOM	1572	O	HIS	1650	15.651	18.133	4.091	1.00	77.42
	ATOM	1573	N	ILE	1651	16.573	16.385	3.024	1.00	77.73
	ATOM	1575	CA	ILE	1651	17.241	15.864	4.212	1.00	77.02
	ATOM	1576	CB	ILE	1651	17.788	14.433	3.974	1.00	78.24
	ATOM	1577	CG2	ILE	1651	18.647	13.963	5.153	1.00	77.92
	ATOM	1578	CG1	ILE	1651	16.633	13.458	3.750	1.00	80.90
	ATOM	1579	CD1	ILE	1651	17.094	12.032	3.483	1.00	82.41
10	ATOM	1580	C	ILE	1651	18.411	16.748	4.620	1.00	76.15
	ATOM	1581	O	ILE	1651	19.269	17.078	3.803	1.00	76.52
	ATOM	1582	N	ASP	1652	18.432	17.150	5.882	1.00	75.13
	ATOM	1584	CA	ASP	1652	19.527	17.957	6.384	1.00	73.91
	ATOM	1585	CB	ASP	1652	19.068	18.781	7.592	1.00	76.30
	ATOM	1586	CG	ASP	1652	20.216	19.499	8.286	1.00	79.91
	ATOM	1587	OD1	ASP	1652	21.247	19.786	7.636	1.00	82.38
	ATOM	1588	OD2	ASP	1652	20.081	19.780	9.497	1.00	81.51
	ATOM	1589	C	ASP	1652	20.637	16.984	6.783	1.00	72.31
15	ATOM	1590	O	ASP	1652	20.599	16.403	7.866	1.00	71.41
	ATOM	1591	N	TYR	1653	21.610	16.805	5.894	1.00	71.44
	ATOM	1593	CA	TYR	1653	22.736	15.900	6.143	1.00	70.07
	ATOM	1594	CB	TYR	1653	23.655	15.849	4.921	1.00	66.96
	ATOM	1595	CG	TYR	1653	23.153	14.932	3.834	1.00	66.43
	ATOM	1596	CD1	TYR	1653	23.881	14.757	2.657	1.00	66.60
	ATOM	1597	CE1	TYR	1653	23.434	13.898	1.653	1.00	68.33
	ATOM	1598	CD2	TYR	1653	21.960	14.224	3.981	1.00	66.58
	ATOM	1599	CE2	TYR	1653	21.500	13.363	2.990	1.00	68.84
20	ATOM	1600	CZ	TYR	1653	22.241	13.205	1.823	1.00	69.34
	ATOM	1601	OH	TYR	1653	21.781	12.360	0.833	1.00	69.88
	ATOM	1603	C	TYR	1653	23.557	16.227	7.391	1.00	70.80
	ATOM	1604	O	TYR	1653	24.197	15.351	7.975	1.00	70.62
	ATOM	1605	N	TYR	1654	23.531	17.488	7.802	1.00	70.76
	ATOM	1607	CA	TYR	1654	24.280	17.902	8.972	1.00	70.97
	ATOM	1608	CB	TYR	1654	24.795	19.328	8.783	1.00	69.27
	ATOM	1609	CG	TYR	1654	25.935	19.401	7.787	1.00	69.68
	ATOM	1610	CD1	TYR	1654	25.696	19.352	6.415	1.00	69.51
25	ATOM	1611	CE1	TYR	1654	26.750	19.380	5.498	1.00	70.15
	ATOM	1612	CD2	TYR	1654	27.256	19.482	8.221	1.00	69.92
	ATOM	1613	CE2	TYR	1654	28.314	19.513	7.316	1.00	70.26
	ATOM	1614	CZ	TYR	1654	28.057	19.462	5.958	1.00	70.22
	ATOM	1615	OH	TYR	1654	29.111	19.492	5.069	1.00	69.67
	ATOM	1617	C	TYR	1654	23.503	17.763	10.272	1.00	72.19
	ATOM	1618	O	TYR	1654	24.035	18.043	11.344	1.00	73.21
	ATOM	1619	N	LYS	1655	22.269	17.275	10.183	1.00	73.05
	ATOM	1621	CA	LYS	1655	21.424	17.108	11.363	1.00	74.81
30	ATOM	1622	CB	LYS	1655	19.955	17.124	10.953	1.00	75.63
	ATOM	1623	CG	LYS	1655	18.978	17.239	12.102	1.00	79.16
	ATOM	1624	CD	LYS	1655	17.581	17.513	11.576	1.00	84.09
	ATOM	1625	CE	LYS	1655	16.517	17.244	12.634	1.00	87.56
	ATOM	1626	NZ	LYS	1655	15.139	17.478	12.097	1.00	89.36
	ATOM	1630	C	LYS	1655	21.738	15.834	12.156	1.00	75.72
	ATOM	1631	O	LYS	1655	21.900	14.751	11.586	1.00	77.14
	ATOM	1632	N	LYS	1656	21.815	15.977	13.477	1.00	75.08
	ATOM	1634	CA	LYS	1656	22.106	14.857	14.363	1.00	73.36
35	ATOM	1635	CB	LYS	1656	23.062	15.296	15.477	1.00	72.88
	ATOM	1636	CG	LYS	1656	24.475	15.599	15.007	1.00	72.87

	ATOM	1637	CD	LYS	1656	25.346	16.048	16.167	1.00	74.66
	ATOM	1638	CE	LYS	1656	26.830	15.945	15.828	1.00	74.84
	ATOM	1639	NZ	LYS	1656	27.701	16.322	16.981	1.00	73.74
	ATOM	1643	C	LYS	1656	20.827	14.311	14.982	1.00	72.45
	ATOM	1644	O	LYS	1656	19.795	14.991	15.007	1.00	72.74
5	ATOM	1645	N	THR	1657	20.900	13.075	15.469	1.00	71.26
	ATOM	1647	CA	THR	1657	19.763	12.426	16.107	1.00	70.05
	ATOM	1648	CB	THR	1657	19.969	10.886	16.206	1.00	68.30
	ATOM	1649	OG1	THR	1657	21.084	10.598	17.060	1.00	69.34
	ATOM	1651	CG2	THR	1657	20.244	10.292	14.839	1.00	66.16
	ATOM	1652	C	THR	1657	19.707	13.019	17.504	1.00	70.37
	ATOM	1653	O	THR	1657	20.608	13.761	17.892	1.00	71.47
	ATOM	1654	N	THR	1658	18.669	12.691	18.263	1.00	70.80
	ATOM	1656	CA	THR	1658	18.559	13.205	19.626	1.00	71.54
10	ATOM	1657	CB	THR	1658	17.334	12.600	20.325	1.00	71.20
	ATOM	1658	C	THR	1658	19.844	12.865	20.394	1.00	70.91
	ATOM	1659	O	THR	1658	20.429	13.722	21.063	1.00	71.25
	ATOM	1660	N	ASN	1659	20.331	11.639	20.199	1.00	68.87
	ATOM	1662	CA	ASN	1659	21.537	11.157	20.871	1.00	65.52
	ATOM	1663	CB	ASN	1659	21.602	9.635	20.796	1.00	67.39
	ATOM	1664	CG	ASN	1659	22.419	9.032	21.916	1.00	69.42
	ATOM	1665	OD1	ASN	1659	22.261	9.410	23.076	1.00	71.70
	ATOM	1666	ND2	ASN	1659	23.278	8.069	21.583	1.00	68.93
15	ATOM	1669	C	ASN	1659	22.830	11.749	20.318	1.00	62.51
	ATOM	1670	O	ASN	1659	23.917	11.351	20.733	1.00	61.47
	ATOM	1671	N	GLY	1660	22.706	12.654	19.348	1.00	59.76
	ATOM	1673	CA	GLY	1660	23.859	13.307	18.750	1.00	57.70
	ATOM	1674	C	GLY	1660	24.553	12.593	17.597	1.00	56.98
	ATOM	1675	O	GLY	1660	25.659	12.979	17.199	1.00	57.55
	ATOM	1676	N	ARG	1661	23.909	11.573	17.037	1.00	55.34
	ATOM	1678	CA	ARG	1661	24.504	10.826	15.928	1.00	52.28
	ATOM	1679	CB	ARG	1661	24.255	9.334	16.092	1.00	50.68
20	ATOM	1680	CG	ARG	1661	24.811	8.744	17.365	1.00	49.61
	ATOM	1681	CD	ARG	1661	24.542	7.267	17.361	1.00	52.30
	ATOM	1682	NE	ARG	1661	24.942	6.599	18.595	1.00	53.64
	ATOM	1684	CZ	ARG	1661	24.731	5.306	18.826	1.00	56.32
	ATOM	1685	NH1	ARG	1661	24.124	4.559	17.901	1.00	54.04
	ATOM	1688	NH2	ARG	1661	25.145	4.754	19.965	1.00	54.48
	ATOM	1691	C	ARG	1661	24.015	11.288	14.560	1.00	49.89
	ATOM	1692	O	ARG	1661	22.916	11.812	14.429	1.00	51.43
	ATOM	1693	N	LEU	1662	24.839	11.080	13.542	1.00	45.78
25	ATOM	1695	CA	LEU	1662	24.503	11.481	12.186	1.00	43.05
	ATOM	1696	CB	LEU	1662	25.762	12.020	11.492	1.00	42.15
	ATOM	1697	CG	LEU	1662	26.351	13.306	12.088	1.00	40.60
	ATOM	1698	CD1	LEU	1662	27.780	13.512	11.641	1.00	38.14
	ATOM	1699	CD2	LEU	1662	25.484	14.499	11.705	1.00	42.00
	ATOM	1700	C	LEU	1662	23.867	10.346	11.370	1.00	41.81
	ATOM	1701	O	LEU	1662	24.548	9.406	10.957	1.00	40.46
	ATOM	1702	N	PRO	1663	22.546	10.428	11.118	1.00	40.49
	ATOM	1703	CD	PRO	1663	21.659	11.519	11.561	1.00	40.60
30	ATOM	1704	CA	PRO	1663	21.794	9.423	10.351	1.00	38.17
	ATOM	1705	CB	PRO	1663	20.433	10.095	10.158	1.00	38.43
	ATOM	1706	CG	PRO	1663	20.282	10.901	11.414	1.00	40.65
	ATOM	1707	C	PRO	1663	22.445	9.059	9.012	1.00	35.40
	ATOM	1708	O	PRO	1663	22.265	7.949	8.521	1.00	33.01
	ATOM	1709	N	VAL	1664	23.200	9.989	8.426	1.00	34.56
	ATOM	1711	CA	VAL	1664	23.889	9.722	7.160	1.00	32.91
	ATOM	1712	CB	VAL	1664	24.757	10.916	6.659	1.00	33.13
	ATOM	1713	CG1	VAL	1664	23.912	11.929	5.968	1.00	33.44
35	ATOM	1714	CG2	VAL	1664	25.521	11.554	7.792	1.00	33.68
	ATOM	1715	C	VAL	1664	24.812	8.511	7.266	1.00	30.58

	ATOM	1716	O	VAL	1664	25.157	7.903	6.257	1.00	29.20
	ATOM	1717	N	LYS	1665	25.211	8.171	8.489	1.00	28.02
	ATOM	1719	CA	LYS	1665	26.102	7.044	8.726	1.00	24.95
	ATOM	1720	CB	LYS	1665	26.749	7.153	10.098	1.00	24.39
	ATOM	1721	CG	LYS	1665	27.811	8.231	10.140	1.00	28.36
5	ATOM	1722	CD	LYS	1665	28.189	8.628	11.548	1.00	29.24
	ATOM	1723	CE	LYS	1665	29.269	9.690	11.489	1.00	31.15
	ATOM	1724	NZ	LYS	1665	29.639	10.194	12.836	1.00	35.47
	ATOM	1728	C	LYS	1665	25.440	5.692	8.543	1.00	25.16
	ATOM	1729	O	LYS	1665	26.096	4.671	8.627	1.00	24.34
	ATOM	1730	N	TRP	1666	24.138	5.698	8.286	1.00	25.16
	ATOM	1732	CA	TRP	1666	23.414	4.461	8.053	1.00	26.61
	ATOM	1733	CB	TRP	1666	22.157	4.412	8.917	1.00	28.17
	ATOM	1734	CG	TRP	1666	22.428	3.931	10.330	1.00	30.26
10	ATOM	1735	CD2	TRP	1666	22.930	4.714	11.426	1.00	26.92
	ATOM	1736	CE2	TRP	1666	23.063	3.837	12.537	1.00	26.34
	ATOM	1737	CE3	TRP	1666	23.286	6.057	11.598	1.00	24.69
	ATOM	1738	CD1	TRP	1666	22.276	2.656	10.800	1.00	26.44
	ATOM	1739	NE1	TRP	1666	22.659	2.592	12.118	1.00	25.65
	ATOM	1741	CZ2	TRP	1666	23.535	4.264	13.779	1.00	24.97
	ATOM	1742	CZ3	TRP	1666	23.758	6.484	12.837	1.00	22.23
	ATOM	1743	CH2	TRP	1666	23.877	5.587	13.908	1.00	24.97
	ATOM	1744	C	TRP	1666	23.048	4.345	6.572	1.00	27.24
15	ATOM	1745	O	TRP	1666	22.573	3.301	6.116	1.00	29.16
	ATOM	1746	N	MET	1667	23.355	5.390	5.811	1.00	26.70
	ATOM	1748	CA	MET	1667	23.022	5.444	4.398	1.00	25.21
	ATOM	1749	CB	MET	1667	22.828	6.893	3.963	1.00	28.81
	ATOM	1750	CG	MET	1667	21.704	7.630	4.637	1.00	35.42
	ATOM	1751	SD	MET	1667	21.567	9.283	3.924	1.00	42.64
	ATOM	1752	CE	MET	1667	20.959	8.858	2.369	1.00	41.32
	ATOM	1753	C	MET	1667	23.984	4.807	3.417	1.00	25.03
	ATOM	1754	O	MET	1667	25.182	5.047	3.446	1.00	24.24
20	ATOM	1755	N	ALA	1668	23.420	4.034	2.501	1.00	26.70
	ATOM	1757	CA	ALA	1668	24.186	3.398	1.441	1.00	27.82
	ATOM	1758	CB	ALA	1668	23.272	2.509	0.601	1.00	25.36
	ATOM	1759	C	ALA	1668	24.738	4.528	0.575	1.00	28.42
	ATOM	1760	O	ALA	1668	24.044	5.521	0.321	1.00	27.52
	ATOM	1761	N	PRO	1669	25.972	4.374	0.065	1.00	28.95
	ATOM	1762	CD	PRO	1669	26.867	3.214	0.170	1.00	27.98
	ATOM	1763	CA	PRO	1669	26.571	5.418	-0.775	1.00	28.76
	ATOM	1764	CB	PRO	1669	27.814	4.731	-1.326	1.00	28.58
25	ATOM	1765	CG	PRO	1669	28.193	3.809	-0.209	1.00	30.22
	ATOM	1766	C	PRO	1669	25.647	5.909	-1.893	1.00	27.08
	ATOM	1767	O	PRO	1669	25.496	7.107	-2.093	1.00	28.31
	ATOM	1768	N	GLU	1670	24.993	4.997	-2.595	1.00	25.42
	ATOM	1770	CA	GLU	1670	24.110	5.423	-3.673	1.00	27.02
	ATOM	1771	CB	GLU	1670	23.680	4.233	-4.542	1.00	27.18
	ATOM	1772	CG	GLU	1670	22.662	3.294	-3.911	1.00	27.66
	ATOM	1773	CD	GLU	1670	23.280	2.162	-3.112	1.00	27.75
	ATOM	1774	OE1	GLU	1670	22.488	1.309	-2.647	1.00	27.12
30	ATOM	1775	OE2	GLU	1670	24.526	2.114	-2.944	1.00	21.64
	ATOM	1776	C	GLU	1670	22.896	6.229	-3.189	1.00	26.88
	ATOM	1777	O	GLU	1670	22.348	7.037	-3.929	1.00	24.52
	ATOM	1778	N	ALA	1671	22.477	6.009	-1.948	1.00	29.43
	ATOM	1780	CA	ALA	1671	21.342	6.744	-1.392	1.00	29.29
	ATOM	1781	CB	ALA	1671	20.751	5.989	-0.217	1.00	26.98
	ATOM	1782	C	ALA	1671	21.826	8.124	-0.939	1.00	31.14
	ATOM	1783	O	ALA	1671	21.159	9.135	-1.143	1.00	31.67
	ATOM	1784	N	LEU	1672	23.013	8.139	-0.343	1.00	32.31
35	ATOM	1786	CA	LEU	1672	23.636	9.352	0.154	1.00	33.79
	ATOM	1787	CB	LEU	1672	24.841	8.986	1.008	1.00	34.49

	ATOM	1788	CG	LEU	1672	25.585	10.166	1.618	1.00	37.16
	ATOM	1789	CD1	LEU	1672	24.713	10.840	2.666	1.00	42.22
	ATOM	1790	CD2	LEU	1672	26.863	9.665	2.237	1.00	33.93
	ATOM	1791	C	LEU	1672	24.078	10.280	-0.972	1.00	36.30
	ATOM	1792	O	LEU	1672	23.789	11.478	-0.949	1.00	39.09
5	ATOM	1793	N	PHE	1673	24.770	9.723	-1.957	1.00	34.39
	ATOM	1795	CA	PHE	1673	25.266	10.504	-3.075	1.00	33.81
	ATOM	1796	CB	PHE	1673	26.553	9.874	-3.625	1.00	33.15
	ATOM	1797	CG	PHE	1673	27.661	9.761	-2.617	1.00	33.44
	ATOM	1798	CD1	PHE	1673	28.313	8.545	-2.419	1.00	32.17
	ATOM	1799	CD2	PHE	1673	28.055	10.867	-1.861	1.00	34.87
	ATOM	1800	CE1	PHE	1673	29.346	8.419	-1.484	1.00	31.98
	ATOM	1801	CE2	PHE	1673	29.090	10.757	-0.919	1.00	36.31
	ATOM	1802	CZ	PHE	1673	29.736	9.525	-0.732	1.00	34.55
10	ATOM	1803	C	PHE	1673	24.273	10.670	-4.217	1.00	34.79
	ATOM	1804	O	PHE	1673	24.135	11.754	-4.765	1.00	35.74
	ATOM	1805	N	ASP	1674	23.584	9.588	-4.572	1.00	37.31
	ATOM	1807	CA	ASP	1674	22.650	9.601	-5.698	1.00	35.61
	ATOM	1808	CB	ASP	1674	22.917	8.392	-6.600	1.00	37.01
	ATOM	1809	CG	ASP	1674	24.362	8.288	-7.041	1.00	41.02
	ATOM	1810	OD1	ASP	1674	25.030	9.340	-7.194	1.00	43.07
	ATOM	1811	OD2	ASP	1674	24.828	7.145	-7.251	1.00	42.24
	ATOM	1812	C	ASP	1674	21.162	9.632	-5.360	1.00	37.06
15	ATOM	1813	O	ASP	1674	20.315	9.506	-6.257	1.00	36.37
	ATOM	1814	N	ARG	1675	20.840	9.745	-4.077	1.00	37.78
	ATOM	1816	CA	ARG	1675	19.445	9.791	-3.650	1.00	39.41
	ATOM	1817	CB	ARG	1675	18.832	11.137	-4.039	1.00	44.39
	ATOM	1818	CG	ARG	1675	19.413	12.299	-3.269	1.00	54.30
	ATOM	1819	CD	ARG	1675	19.516	13.551	-4.127	1.00	63.84
	ATOM	1820	NE	ARG	1675	20.060	14.664	-3.349	1.00	73.69
	ATOM	1822	CZ	ARG	1675	19.652	15.925	-3.453	1.00	77.10
	ATOM	1823	NH1	ARG	1675	18.695	16.253	-4.312	1.00	79.65
20	ATOM	1826	NH2	ARG	1675	20.177	16.855	-2.665	1.00	79.31
	ATOM	1829	C	ARG	1675	18.617	8.639	-4.221	1.00	37.46
	ATOM	1830	O	ARG	1675	17.447	8.808	-4.557	1.00	38.57
	ATOM	1831	N	ILE	1676	19.235	7.475	-4.351	1.00	34.37
	ATOM	1833	CA	ILE	1676	18.545	6.313	-4.874	1.00	32.99
	ATOM	1834	CB	ILE	1676	19.358	5.644	-5.976	1.00	33.98
	ATOM	1835	CG2	ILE	1676	18.552	4.529	-6.602	1.00	35.04
	ATOM	1836	CG1	ILE	1676	19.708	6.663	-7.050	1.00	34.92
	ATOM	1837	CD1	ILE	1676	20.799	6.200	-7.962	1.00	41.16
25	ATOM	1838	C	ILE	1676	18.315	5.315	-3.743	1.00	31.55
	ATOM	1839	O	ILE	1676	19.245	4.632	-3.300	1.00	30.65
	ATOM	1840	N	TYR	1677	17.082	5.279	-3.246	1.00	30.88
	ATOM	1842	CA	TYR	1677	16.701	4.371	-2.173	1.00	27.10
	ATOM	1843	CB	TYR	1677	15.771	5.074	-1.208	1.00	28.30
	ATOM	1844	CG	TYR	1677	16.457	6.136	-0.406	1.00	30.61
	ATOM	1845	CD1	TYR	1677	16.598	7.432	-0.905	1.00	30.82
	ATOM	1846	CE1	TYR	1677	17.212	8.424	-0.159	1.00	30.75
	ATOM	1847	CD2	TYR	1677	16.952	5.857	0.863	1.00	29.75
30	ATOM	1848	CE2	TYR	1677	17.567	6.842	1.621	1.00	32.62
	ATOM	1849	CZ	TYR	1677	17.688	8.125	1.110	1.00	34.51
	ATOM	1850	OH	TYR	1677	18.238	9.118	1.888	1.00	38.89
	ATOM	1852	C	TYR	1677	16.029	3.149	-2.743	1.00	25.47
	ATOM	1853	O	TYR	1677	15.132	3.264	-3.578	1.00	26.00
	ATOM	1854	N	THR	1678	16.459	1.983	-2.272	1.00	24.27
	ATOM	1856	CA	THR	1678	15.942	0.701	-2.734	1.00	24.09
	ATOM	1857	CB	THR	1678	16.830	0.123	-3.853	1.00	24.19
	ATOM	1858	OG1	THR	1678	18.165	-0.008	-3.349	1.00	27.81
35	ATOM	1860	CG2	THR	1678	16.843	1.009	-5.085	1.00	24.15
	ATOM	1861	C	THR	1678	15.979	-0.297	-1.577	1.00	25.02

	ATOM	1862	O	THR	1678	16.379	0.036	-0.465	1.00	27.65
	ATOM	1863	N	HIS	1679	15.569	-1.530	-1.844	1.00	25.04
	ATOM	1865	CA	HIS	1679	15.591	-2.560	-0.818	1.00	24.35
	ATOM	1866	CB	HIS	1679	14.853	-3.812	-1.298	1.00	23.78
	ATOM	1867	CG	HIS	1679	13.390	-3.592	-1.536	1.00	27.24
5	ATOM	1868	CD2	HIS	1679	12.627	-3.758	-2.643	1.00	28.22
	ATOM	1869	ND1	HIS	1679	12.532	-3.137	-0.551	1.00	30.64
	ATOM	1871	CE1	HIS	1679	11.310	-3.028	-1.041	1.00	28.13
	ATOM	1872	NE2	HIS	1679	11.339	-3.400	-2.307	1.00	28.52
	ATOM	1874	C	HIS	1679	17.056	-2.846	-0.514	1.00	22.52
	ATOM	1875	O	HIS	1679	17.419	-3.179	0.613	1.00	22.58
	ATOM	1876	N	GLN	1680	17.898	-2.604	-1.516	1.00	24.34
	ATOM	1878	CA	GLN	1680	19.341	-2.800	-1.406	1.00	23.52
	ATOM	1879	CB	GLN	1680	19.998	-2.781	-2.782	1.00	25.36
10	ATOM	1880	CG	GLN	1680	19.741	-4.050	-3.577	1.00	33.28
	ATOM	1881	CD	GLN	1680	19.212	-3.763	-4.949	1.00	34.68
	ATOM	1882	OE1	GLN	1680	18.683	-2.686	-5.187	1.00	41.24
	ATOM	1883	NE2	GLN	1680	19.357	-4.713	-5.867	1.00	32.10
	ATOM	1886	C	GLN	1680	19.998	-1.767	-0.514	1.00	23.38
	ATOM	1887	O	GLN	1680	20.925	-2.094	0.224	1.00	25.12
	ATOM	1888	N	SER	1681	19.533	-0.521	-0.562	1.00	20.87
	ATOM	1890	CA	SER	1681	20.133	0.480	0.303	1.00	20.53
	ATOM	1891	CB	SER	1681	19.821	1.919	-0.151	1.00	19.58
15	ATOM	1892	OG	SER	1681	18.445	2.126	-0.425	1.00	20.67
	ATOM	1894	C	SER	1681	19.696	0.189	1.741	1.00	22.22
	ATOM	1895	O	SER	1681	20.439	0.455	2.681	1.00	23.62
	ATOM	1896	N	ASP	1682	18.530	-0.436	1.900	1.00	22.44
	ATOM	1898	CA	ASP	1682	18.054	-0.816	3.231	1.00	22.70
	ATOM	1899	CB	ASP	1682	16.607	-1.293	3.180	1.00	24.24
	ATOM	1900	CG	ASP	1682	15.603	-0.165	3.352	1.00	28.23
	ATOM	1901	OD1	ASP	1682	14.410	-0.425	3.108	1.00	28.14
	ATOM	1902	OD2	ASP	1682	15.976	0.960	3.757	1.00	25.23
20	ATOM	1903	C	ASP	1682	18.926	-1.941	3.777	1.00	23.92
	ATOM	1904	O	ASP	1682	19.121	-2.057	4.990	1.00	26.24
	ATOM	1905	N	VAL	1683	19.433	-2.788	2.884	1.00	23.67
	ATOM	1907	CA	VAL	1683	20.300	-3.888	3.302	1.00	22.42
	ATOM	1908	CB	VAL	1683	20.562	-4.881	2.141	1.00	23.70
	ATOM	1909	CG1	VAL	1683	21.724	-5.802	2.459	1.00	19.73
	ATOM	1910	CG2	VAL	1683	19.292	-5.713	1.889	1.00	19.85
	ATOM	1911	C	VAL	1683	21.584	-3.298	3.860	1.00	21.94
	ATOM	1912	O	VAL	1683	22.030	-3.688	4.938	1.00	22.69
25	ATOM	1913	N	TRP	1684	22.141	-2.320	3.154	1.00	20.51
	ATOM	1915	CA	TRP	1684	23.349	-1.633	3.611	1.00	20.31
	ATOM	1916	CB	TRP	1684	23.659	-0.446	2.680	1.00	19.01
	ATOM	1917	CG	TRP	1684	24.802	0.410	3.145	1.00	20.67
	ATOM	1918	CD2	TRP	1684	26.114	0.468	2.587	1.00	22.26
	ATOM	1919	CE2	TRP	1684	26.890	1.316	3.408	1.00	21.22
	ATOM	1920	CE3	TRP	1684	26.718	-0.127	1.463	1.00	22.51
	ATOM	1921	CD1	TRP	1684	24.825	1.229	4.248	1.00	19.91
	ATOM	1922	NE1	TRP	1684	26.079	1.763	4.414	1.00	18.59
30	ATOM	1924	CZ2	TRP	1684	28.236	1.586	3.148	1.00	20.81
	ATOM	1925	CZ3	TRP	1684	28.059	0.141	1.204	1.00	22.01
	ATOM	1926	CH2	TRP	1684	28.806	0.992	2.047	1.00	23.34
	ATOM	1927	C	TRP	1684	23.131	-1.150	5.069	1.00	21.49
	ATOM	1928	O	TRP	1684	23.958	-1.412	5.954	1.00	23.34
	ATOM	1929	N	SER	1685	22.015	-0.463	5.308	1.00	21.84
	ATOM	1931	CA	SER	1685	21.652	0.042	6.634	1.00	20.02
	ATOM	1932	CB	SER	1685	20.310	0.773	6.559	1.00	19.12
	ATOM	1933	OG	SER	1685	20.335	1.791	5.578	1.00	21.62
35	ATOM	1935	C	SER	1685	21.551	-1.111	7.648	1.00	22.64
	ATOM	1936	O	SER	1685	21.908	-0.946	8.829	1.00	22.09

	ATOM	1937	N	PHE	1686	21.043	-2.266	7.202	1.00	22.44
	ATOM	1939	CA	PHE	1686	20.939	-3.438	8.075	1.00	22.91
	ATOM	1940	CB	PHE	1686	20.196	-4.588	7.380	1.00	23.75
	ATOM	1941	CG	PHE	1686	20.027	-5.808	8.256	1.00	23.61
5	ATOM	1942	CD1	PHE	1686	19.220	-5.757	9.388	1.00	21.21
	ATOM	1943	CD2	PHE	1686	20.731	-6.976	7.990	1.00	23.91
	ATOM	1944	CE1	PHE	1686	19.118	-6.836	10.240	1.00	20.66
	ATOM	1945	CE2	PHE	1686	20.636	-8.074	8.841	1.00	22.47
	ATOM	1946	CZ	PHE	1686	19.828	-7.999	9.972	1.00	23.35
	ATOM	1947	C	PHE	1686	22.339	-3.904	8.522	1.00	22.60
	ATOM	1948	O	PHE	1686	22.526	-4.382	9.646	1.00	22.83
	ATOM	1949	N	GLY	1687	23.312	-3.770	7.626	1.00	23.82
	ATOM	1951	CA	GLY	1687	24.682	-4.140	7.941	1.00	22.58
10	ATOM	1952	C	GLY	1687	25.175	-3.262	9.071	1.00	21.49
	ATOM	1953	O	GLY	1687	25.832	-3.749	9.990	1.00	21.62
	ATOM	1954	N	VAL	1688	24.849	-1.968	9.008	1.00	21.15
	ATOM	1956	CA	VAL	1688	25.229	-1.008	10.052	1.00	20.56
	ATOM	1957	CB	VAL	1688	24.894	0.479	9.647	1.00	17.69
	ATOM	1958	CG1	VAL	1688	25.408	1.456	10.690	1.00	15.11
	ATOM	1959	CG2	VAL	1688	25.518	0.821	8.314	1.00	11.54
	ATOM	1960	C	VAL	1688	24.494	-1.398	11.346	1.00	22.60
	ATOM	1961	O	VAL	1688	25.083	-1.407	12.428	1.00	25.23
	ATOM	1962	N	LEU	1689	23.215	-1.755	11.229	1.00	26.09
15	ATOM	1964	CA	LEU	1689	22.423	-2.175	12.387	1.00	25.16
	ATOM	1965	CB	LEU	1689	20.976	-2.455	11.965	1.00	25.91
	ATOM	1966	CG	LEU	1689	19.913	-2.560	13.068	1.00	27.54
	ATOM	1967	CD1	LEU	1689	18.557	-2.241	12.496	1.00	28.11
	ATOM	1968	CD2	LEU	1689	19.898	-3.940	13.704	1.00	31.67
	ATOM	1969	C	LEU	1689	23.055	-3.426	13.018	1.00	27.49
	ATOM	1970	O	LEU	1689	23.128	-3.532	14.246	1.00	28.99
	ATOM	1971	N	LEU	1690	23.485	-4.374	12.180	1.00	27.67
	ATOM	1973	CA	LEU	1690	24.149	-5.596	12.643	1.00	26.76
20	ATOM	1974	CB	LEU	1690	24.616	-6.453	11.456	1.00	28.58
	ATOM	1975	CG	LEU	1690	23.651	-7.406	10.733	1.00	29.46
	ATOM	1976	CD1	LEU	1690	24.372	-8.064	9.565	1.00	27.79
	ATOM	1977	CD2	LEU	1690	23.130	-8.488	11.691	1.00	28.15
	ATOM	1978	C	LEU	1690	25.362	-5.176	13.476	1.00	26.19
	ATOM	1979	O	LEU	1690	25.565	-5.670	14.597	1.00	25.29
	ATOM	1980	N	TRP	1691	26.124	-4.217	12.946	1.00	25.89
	ATOM	1982	CA	TRP	1691	27.302	-3.682	13.631	1.00	27.31
	ATOM	1983	CB	TRP	1691	27.979	-2.628	12.755	1.00	25.21
25	ATOM	1984	CG	TRP	1691	29.338	-2.170	13.257	1.00	27.00
	ATOM	1985	CD2	TRP	1691	29.606	-1.060	14.134	1.00	24.28
	ATOM	1986	CE2	TRP	1691	31.001	-0.988	14.297	1.00	23.03
	ATOM	1987	CE3	TRP	1691	28.792	-0.118	14.778	1.00	22.80
	ATOM	1988	CD1	TRP	1691	30.562	-2.712	12.944	1.00	24.10
	ATOM	1989	NE1	TRP	1691	31.557	-2.010	13.567	1.00	23.41
	ATOM	1991	CZ2	TRP	1691	31.617	-0.011	15.097	1.00	25.00
	ATOM	1992	CZ3	TRP	1691	29.398	0.851	15.573	1.00	26.78
	ATOM	1993	CH2	TRP	1691	30.802	0.900	15.719	1.00	27.78
30	ATOM	1994	C	TRP	1691	26.947	-3.088	15.012	1.00	28.70
	ATOM	1995	O	TRP	1691	27.708	-3.245	15.974	1.00	29.56
	ATOM	1996	N	GLU	1692	25.808	-2.400	15.104	1.00	29.51
	ATOM	1998	CA	GLU	1692	25.349	-1.817	16.371	1.00	27.55
	ATOM	1999	CB	GLU	1692	24.120	-0.935	16.171	1.00	28.35
	ATOM	2000	CG	GLU	1692	24.273	0.221	15.219	1.00	24.70
	ATOM	2001	CD	GLU	1692	22.982	0.989	15.100	1.00	25.44
	ATOM	2002	OE1	GLU	1692	22.224	0.744	14.148	1.00	24.34
	ATOM	2003	OE2	GLU	1692	22.696	1.816	15.982	1.00	27.57
35	ATOM	2004	C	GLU	1692	24.958	-2.918	17.352	1.00	28.74
	ATOM	2005	O	GLU	1692	25.099	-2.753	18.557	1.00	28.76

	ATOM	2006	N	ILE	1693	24.421	-4.023	16.844	1.00	29.23
	ATOM	2008	CA	ILE	1693	24.027	-5.125	17.712	1.00	27.48
	ATOM	2009	CB	ILE	1693	23.205	-6.226	16.944	1.00	28.80
	ATOM	2010	CG2	ILE	1693	22.983	-7.469	17.842	1.00	22.98
	ATOM	2011	CG1	ILE	1693	21.840	-5.658	16.508	1.00	27.36
5	ATOM	2012	CD1	ILE	1693	21.005	-6.585	15.635	1.00	24.84
	ATOM	2013	C	ILE	1693	25.259	-5.750	18.357	1.00	27.27
	ATOM	2014	O	ILE	1693	25.320	-5.902	19.575	1.00	28.15
	ATOM	2015	N	PHE	1694	26.273	-6.043	17.552	1.00	27.83
	ATOM	2017	CA	PHE	1694	27.473	-6.677	18.095	1.00	29.88
	ATOM	2018	CB	PHE	1694	28.143	-7.525	17.011	1.00	28.66
	ATOM	2019	CG	PHE	1694	27.223	-8.574	16.463	1.00	29.92
	ATOM	2020	CD1	PHE	1694	26.628	-8.424	15.220	1.00	30.20
	ATOM	2021	CD2	PHE	1694	26.809	-9.630	17.269	1.00	30.81
10	ATOM	2022	CE1	PHE	1694	25.625	-9.294	14.801	1.00	32.42
	ATOM	2023	CE2	PHE	1694	25.805	-10.508	16.857	1.00	32.30
	ATOM	2024	CZ	PHE	1694	25.210	-10.337	15.628	1.00	31.13
	ATOM	2025	C	PHE	1694	28.429	-5.784	18.890	1.00	31.07
	ATOM	2026	O	PHE	1694	29.376	-6.273	19.509	1.00	33.16
	ATOM	2027	N	THR	1695	28.157	-4.480	18.897	1.00	29.20
	ATOM	2029	CA	THR	1695	28.934	-3.532	19.670	1.00	27.38
	ATOM	2030	CB	THR	1695	29.412	-2.333	18.823	1.00	24.77
	ATOM	2031	OG1	THR	1695	28.287	-1.652	18.274	1.00	26.27
15	ATOM	2033	CG2	THR	1695	30.305	-2.800	17.706	1.00	20.18
	ATOM	2034	C	THR	1695	28.053	-3.034	20.822	1.00	29.84
	ATOM	2035	O	THR	1695	28.430	-2.103	21.548	1.00	32.77
	ATOM	2036	N	LEU	1696	26.898	-3.687	20.988	1.00	28.52
	ATOM	2038	CA	LEU	1696	25.915	-3.364	22.029	1.00	28.82
	ATOM	2039	CB	LEU	1696	26.356	-3.886	23.394	1.00	32.50
	ATOM	2040	CG	LEU	1696	26.658	-5.379	23.476	1.00	33.24
	ATOM	2041	CD1	LEU	1696	27.205	-5.717	24.849	1.00	34.15
	ATOM	2042	CD2	LEU	1696	25.398	-6.150	23.191	1.00	37.24
20	ATOM	2043	C	LEU	1696	25.553	-1.888	22.131	1.00	26.98
	ATOM	2044	O	LEU	1696	25.579	-1.297	23.207	1.00	27.59
	ATOM	2045	N	GLY	1697	25.148	-1.317	21.007	1.00	27.86
	ATOM	2047	CA	GLY	1697	24.767	0.074	20.980	1.00	27.40
	ATOM	2048	C	GLY	1697	25.927	0.962	20.618	1.00	27.47
	ATOM	2049	O	GLY	1697	25.957	2.132	20.998	1.00	28.78
	ATOM	2050	N	GLY	1698	26.888	0.416	19.885	1.00	27.26
	ATOM	2052	CA	GLY	1698	28.031	1.212	19.482	1.00	29.54
	ATOM	2053	C	GLY	1698	27.651	2.301	18.492	1.00	31.17
25	ATOM	2054	O	GLY	1698	26.669	2.177	17.755	1.00	33.73
	ATOM	2055	N	SER	1699	28.418	3.380	18.481	1.00	29.96
	ATOM	2057	CA	SER	1699	28.168	4.491	17.577	1.00	29.37
	ATOM	2058	CB	SER	1699	28.438	5.810	18.319	1.00	31.77
	ATOM	2059	OG	SER	1699	28.575	6.919	17.431	1.00	38.42
	ATOM	2061	C	SER	1699	29.093	4.350	16.369	1.00	27.98
	ATOM	2062	O	SER	1699	30.299	4.310	16.529	1.00	28.18
	ATOM	2063	N	PRO	1700	28.537	4.240	15.153	1.00	29.62
	ATOM	2064	CD	PRO	1700	27.104	4.259	14.794	1.00	31.22
30	ATOM	2065	CA	PRO	1700	29.381	4.107	13.958	1.00	28.95
	ATOM	2066	CB	PRO	1700	28.356	4.003	12.807	1.00	27.21
	ATOM	2067	CG	PRO	1700	27.095	3.556	13.460	1.00	29.33
	ATOM	2068	C	PRO	1700	30.205	5.379	13.773	1.00	28.78
	ATOM	2069	O	PRO	1700	29.737	6.469	14.110	1.00	30.04
	ATOM	2070	N	TYR	1701	31.426	5.239	13.264	1.00	28.35
	ATOM	2072	CA	TYR	1701	32.296	6.390	12.987	1.00	30.77
	ATOM	2073	CB	TYR	1701	31.921	6.987	11.615	1.00	31.67
	ATOM	2074	CG	TYR	1701	32.060	6.037	10.454	1.00	34.61
35	ATOM	2075	CD1	TYR	1701	30.952	5.673	9.686	1.00	38.26
	ATOM	2076	CE1	TYR	1701	31.083	4.806	8.587	1.00	40.99

	ATOM	2077	CD2	TYR	1701	33.301	5.520	10.106	1.00	38.16
	ATOM	2078	CE2	TYR	1701	33.449	4.662	9.020	1.00	41.04
	ATOM	2079	CZ	TYR	1701	32.343	4.312	8.263	1.00	43.11
	ATOM	2080	OH	TYR	1701	32.531	3.478	7.181	1.00	49.53
5	ATOM	2082	C	TYR	1701	32.305	7.532	14.029	1.00	31.41
	ATOM	2083	O	TYR	1701	32.026	8.689	13.698	1.00	33.59
	ATOM	2084	N	PRO	1702	32.635	7.230	15.296	1.00	30.92
	ATOM	2085	CD	PRO	1702	32.998	5.938	15.888	1.00	32.30
	ATOM	2086	CA	PRO	1702	32.656	8.283	16.314	1.00	30.05
	ATOM	2087	CB	PRO	1702	33.123	7.548	17.561	1.00	27.77
	ATOM	2088	CG	PRO	1702	32.676	6.174	17.338	1.00	32.34
	ATOM	2089	C	PRO	1702	33.659	9.366	15.944	1.00	31.42
	ATOM	2090	O	PRO	1702	34.769	9.055	15.513	1.00	30.95
10	ATOM	2091	N	GLY	1703	33.257	10.627	16.117	1.00	31.30
	ATOM	2093	CA	GLY	1703	34.122	11.751	15.817	1.00	29.66
	ATOM	2094	C	GLY	1703	34.172	12.138	14.351	1.00	31.00
	ATOM	2095	O	GLY	1703	34.752	13.165	13.999	1.00	30.69
	ATOM	2096	N	VAL	1704	33.551	11.331	13.491	1.00	31.11
	ATOM	2098	CA	VAL	1704	33.553	11.610	12.059	1.00	29.88
	ATOM	2099	CB	VAL	1704	33.539	10.310	11.244	1.00	28.41
	ATOM	2100	CG1	VAL	1704	33.585	10.624	9.750	1.00	26.24
	ATOM	2101	CG2	VAL	1704	34.702	9.429	11.649	1.00	24.10
	ATOM	2102	C	VAL	1704	32.396	12.508	11.604	1.00	30.80
15	ATOM	2103	O	VAL	1704	31.224	12.146	11.712	1.00	32.50
	ATOM	2104	N	PRO	1705	32.718	13.705	11.104	1.00	30.86
	ATOM	2105	CD	PRO	1705	34.039	14.350	11.077	1.00	30.59
	ATOM	2106	CA	PRO	1705	31.682	14.625	10.645	1.00	31.47
	ATOM	2107	CB	PRO	1705	32.400	15.971	10.680	1.00	32.75
	ATOM	2108	CG	PRO	1705	33.774	15.607	10.289	1.00	32.59
	ATOM	2109	C	PRO	1705	31.258	14.264	9.239	1.00	32.19
	ATOM	2110	O	PRO	1705	31.974	13.536	8.549	1.00	33.91
	ATOM	2111	N	VAL	1706	30.124	14.814	8.806	1.00	32.57
20	ATOM	2113	CA	VAL	1706	29.560	14.576	7.474	1.00	31.80
	ATOM	2114	CB	VAL	1706	28.483	15.632	7.172	1.00	34.66
	ATOM	2115	CG1	VAL	1706	28.022	15.538	5.738	1.00	39.06
	ATOM	2116	CG2	VAL	1706	27.309	15.455	8.106	1.00	36.62
	ATOM	2117	C	VAL	1706	30.578	14.560	6.320	1.00	31.58
	ATOM	2118	O	VAL	1706	30.682	13.585	5.570	1.00	32.35
	ATOM	2119	N	GLU	1707	31.326	15.649	6.189	1.00	31.46
	ATOM	2121	CA	GLU	1707	32.329	15.788	5.139	1.00	31.68
	ATOM	2122	CB	GLU	1707	33.021	17.148	5.267	1.00	32.59
25	ATOM	2123	C	GLU	1707	33.381	14.678	5.114	1.00	32.23
	ATOM	2124	O	GLU	1707	33.740	14.183	4.050	1.00	33.47
	ATOM	2125	N	GLU	1708	33.902	14.316	6.279	1.00	32.90
	ATOM	2127	CA	GLU	1708	34.909	13.268	6.352	1.00	33.86
	ATOM	2128	CB	GLU	1708	35.570	13.244	7.730	1.00	38.54
	ATOM	2129	CG	GLU	1708	36.190	14.575	8.165	1.00	47.63
	ATOM	2130	CD	GLU	1708	37.442	14.962	7.383	1.00	58.35
	ATOM	2131	OE1	GLU	1708	38.117	14.067	6.816	1.00	62.88
	ATOM	2132	OE2	GLU	1708	37.770	16.176	7.355	1.00	64.79
30	ATOM	2133	C	GLU	1708	34.276	11.921	6.043	1.00	33.56
	ATOM	2134	O	GLU	1708	34.927	11.038	5.489	1.00	34.18
	ATOM	2135	N	LEU	1709	32.997	11.774	6.374	1.00	32.91
	ATOM	2137	CA	LEU	1709	32.285	10.532	6.108	1.00	33.83
	ATOM	2138	CB	LEU	1709	30.862	10.563	6.685	1.00	32.28
	ATOM	2139	CG	LEU	1709	30.015	9.363	6.231	1.00	32.92
	ATOM	2140	CD1	LEU	1709	30.541	8.071	6.853	1.00	28.37
	ATOM	2141	CD2	LEU	1709	28.563	9.580	6.568	1.00	31.90
	ATOM	2142	C	LEU	1709	32.222	10.283	4.606	1.00	34.15
35	ATOM	2143	O	LEU	1709	32.412	9.152	4.156	1.00	34.75
	ATOM	2144	N	PHE	1710	31.918	11.332	3.844	1.00	33.83

	ATOM	2146	CA	PHE	1710	31.828	11.248	2.388	1.00	32.90
	ATOM	2147	CB	PHE	1710	31.531	12.622	1.787	1.00	34.85
	ATOM	2148	CG	PHE	1710	30.162	13.132	2.082	1.00	38.60
	ATOM	2149	CD1	PHE	1710	29.150	12.268	2.469	1.00	43.69
	ATOM	2150	CD2	PHE	1710	29.882	14.480	1.984	1.00	45.10
5	ATOM	2151	CE1	PHE	1710	27.873	12.742	2.764	1.00	46.23
	ATOM	2152	CE2	PHE	1710	28.611	14.966	2.274	1.00	48.15
	ATOM	2153	CZ	PHE	1710	27.603	14.086	2.670	1.00	46.90
	ATOM	2154	C	PHE	1710	33.131	10.739	1.803	1.00	31.84
	ATOM	2155	O	PHE	1710	33.134	9.931	0.877	1.00	29.97
	ATOM	2156	N	LYS	1711	34.231	11.224	2.373	1.00	32.45
	ATOM	2158	CA	LYS	1711	35.582	10.860	1.947	1.00	34.53
	ATOM	2159	CB	LYS	1711	36.588	11.755	2.675	1.00	36.17
	ATOM	2160	CG	LYS	1711	38.008	11.669	2.182	1.00	41.07
10	ATOM	2161	CD	LYS	1711	38.912	12.582	3.001	1.00	46.23
	ATOM	2162	CE	LYS	1711	40.311	12.648	2.418	1.00	51.79
	ATOM	2163	NZ	LYS	1711	41.036	11.360	2.556	1.00	57.27
	ATOM	2167	C	LYS	1711	35.867	9.375	2.215	1.00	33.82
	ATOM	2168	O	LYS	1711	36.451	8.688	1.376	1.00	33.20
	ATOM	2169	N	LEU	1712	35.439	8.885	3.382	1.00	34.52
	ATOM	2171	CA	LEU	1712	35.618	7.477	3.754	1.00	33.25
	ATOM	2172	CB	LEU	1712	35.094	7.211	5.189	1.00	30.99
	ATOM	2173	CG	LEU	1712	35.746	7.917	6.393	1.00	29.71
15	ATOM	2174	CD1	LEU	1712	35.047	7.552	7.678	1.00	24.11
	ATOM	2175	CD2	LEU	1712	37.208	7.552	6.497	1.00	32.21
	ATOM	2176	C	LEU	1712	34.833	6.631	2.744	1.00	32.16
	ATOM	2177	O	LEU	1712	35.378	5.732	2.109	1.00	32.77
	ATOM	2178	N	LEU	1713	33.562	6.967	2.563	1.00	31.72
	ATOM	2180	CA	LEU	1713	32.700	6.259	1.637	1.00	33.60
	ATOM	2181	CB	LEU	1713	31.299	6.879	1.619	1.00	36.57
	ATOM	2182	CG	LEU	1713	30.522	6.711	2.930	1.00	37.60
	ATOM	2183	CD1	LEU	1713	29.284	7.575	2.927	1.00	35.03
20	ATOM	2184	CD2	LEU	1713	30.182	5.246	3.157	1.00	33.22
	ATOM	2185	C	LEU	1713	33.285	6.248	0.236	1.00	35.33
	ATOM	2186	O	LEU	1713	33.318	5.203	-0.407	1.00	36.00
	ATOM	2187	N	LYS	1714	33.741	7.405	-0.234	1.00	36.24
	ATOM	2189	CA	LYS	1714	34.331	7.501	-1.566	1.00	36.35
	ATOM	2190	CB	LYS	1714	34.707	8.946	-1.900	1.00	35.82
	ATOM	2191	CG	LYS	1714	33.520	9.837	-2.168	1.00	37.23
	ATOM	2192	CD	LYS	1714	32.712	9.324	-3.337	1.00	40.53
	ATOM	2193	CE	LYS	1714	31.506	10.198	-3.600	1.00	44.51
25	ATOM	2194	NZ	LYS	1714	30.747	9.724	-4.804	1.00	50.76
	ATOM	2198	C	LYS	1714	35.559	6.613	-1.701	1.00	37.60
	ATOM	2199	O	LYS	1714	35.808	6.039	-2.764	1.00	40.82
	ATOM	2200	N	GLU	1715	36.299	6.452	-0.615	1.00	35.61
	ATOM	2202	CA	GLU	1715	37.496	5.630	-0.658	1.00	34.65
	ATOM	2203	CB	GLU	1715	38.517	6.188	0.320	1.00	37.83
	ATOM	2204	CG	GLU	1715	38.897	7.613	-0.036	1.00	42.28
	ATOM	2205	CD	GLU	1715	39.634	8.342	1.061	1.00	45.64
	ATOM	2206	OE1	GLU	1715	39.928	7.726	2.114	1.00	43.09
30	ATOM	2207	OE2	GLU	1715	39.918	9.544	0.853	1.00	47.56
	ATOM	2208	C	GLU	1715	37.244	4.145	-0.419	1.00	32.94
	ATOM	2209	O	GLU	1715	38.177	3.348	-0.419	1.00	33.31
	ATOM	2210	N	GLY	1716	35.983	3.779	-0.213	1.00	29.12
	ATOM	2212	CA	GLY	1716	35.634	2.391	0.004	1.00	26.02
	ATOM	2213	C	GLY	1716	35.946	1.895	1.396	1.00	29.60
	ATOM	2214	O	GLY	1716	36.223	0.715	1.588	1.00	29.81
	ATOM	2215	N	HIS	1717	35.879	2.783	2.379	1.00	29.97
	ATOM	2217	CA	HIS	1717	36.158	2.409	3.763	1.00	30.78
35	ATOM	2218	CB	HIS	1717	36.369	3.659	4.623	1.00	33.25
	ATOM	2219	CG	HIS	1717	36.653	3.360	6.067	1.00	34.70

	ATOM	2220	CD2	HIS	1717	37.820	3.155	6.715	1.00	32.77
	ATOM	2221	ND1	HIS	1717	35.656	3.219	7.010	1.00	36.90
	ATOM	2223	CE1	HIS	1717	36.200	2.932	8.180	1.00	35.87
	ATOM	2224	NE2	HIS	1717	37.513	2.887	8.027	1.00	31.93
	ATOM	2226	C	HIS	1717	35.035	1.577	4.375	1.00	29.63
5	ATOM	2227	O	HIS	1717	33.861	1.847	4.133	1.00	30.82
	ATOM	2228	N	ARG	1718	35.406	0.600	5.201	1.00	27.92
	ATOM	2230	CA	ARG	1718	34.436	-0.258	5.878	1.00	27.30
	ATOM	2231	CB	ARG	1718	34.379	-1.641	5.236	1.00	24.10
	ATOM	2232	CG	ARG	1718	33.939	-1.655	3.789	1.00	26.52
	ATOM	2233	CD	ARG	1718	32.469	-1.288	3.627	1.00	26.96
	ATOM	2234	NE	ARG	1718	32.020	-1.374	2.232	1.00	24.41
	ATOM	2236	CZ	ARG	1718	32.090	-0.377	1.352	1.00	25.51
	ATOM	2237	NH1	ARG	1718	32.611	0.801	1.706	1.00	23.61
10	ATOM	2240	NH2	ARG	1718	31.553	-0.521	0.149	1.00	21.28
	ATOM	2243	C	ARG	1718	34.881	-0.384	7.330	1.00	28.81
	ATOM	2244	O	ARG	1718	36.080	-0.425	7.611	1.00	29.77
	ATOM	2245	N	MET	1719	33.920	-0.377	8.250	1.00	30.40
	ATOM	2247	CA	MET	1719	34.215	-0.485	9.673	1.00	30.62
	ATOM	2248	CB	MET	1719	32.942	-0.339	10.497	1.00	28.91
	ATOM	2249	CG	MET	1719	32.235	1.003	10.316	1.00	30.85
	ATOM	2250	SD	MET	1719	30.829	1.237	11.432	1.00	33.27
	ATOM	2251	CE	MET	1719	29.521	0.416	10.561	1.00	31.81
15	ATOM	2252	C	MET	1719	34.900	-1.793	10.005	1.00	31.32
	ATOM	2253	O	MET	1719	34.755	-2.769	9.278	1.00	31.47
	ATOM	2254	N	ASP	1720	35.651	-1.799	11.103	1.00	33.78
	ATOM	2256	CA	ASP	1720	36.387	-2.983	11.550	1.00	33.45
	ATOM	2257	CB	ASP	1720	37.478	-2.580	12.546	1.00	36.99
	ATOM	2258	CG	ASP	1720	38.585	-1.762	11.908	1.00	41.56
	ATOM	2259	OD1	ASP	1720	38.403	-1.339	10.742	1.00	48.43
	ATOM	2260	OD2	ASP	1720	39.634	-1.546	12.568	1.00	40.99
	ATOM	2261	C	ASP	1720	35.473	-4.001	12.211	1.00	32.12
20	ATOM	2262	O	ASP	1720	34.381	-3.657	12.668	1.00	30.89
	ATOM	2263	N	LYS	1721	35.944	-5.241	12.328	1.00	31.82
	ATOM	2265	CA	LYS	1721	35.127	-6.270	12.953	1.00	31.71
	ATOM	2266	CB	LYS	1721	35.691	-7.679	12.747	1.00	32.34
	ATOM	2267	CG	LYS	1721	34.762	-8.738	13.344	1.00	34.85
	ATOM	2268	CD	LYS	1721	35.111	-10.155	12.961	1.00	37.39
	ATOM	2269	CE	LYS	1721	36.266	-10.674	13.765	1.00	41.42
	ATOM	2270	NZ	LYS	1721	36.348	-12.154	13.635	1.00	46.55
	ATOM	2274	C	LYS	1721	35.007	-6.018	14.430	1.00	33.40
25	ATOM	2275	O	LYS	1721	36.017	-5.879	15.121	1.00	34.26
	ATOM	2276	N	PRO	1722	33.768	-5.924	14.934	1.00	34.26
	ATOM	2277	CD	PRO	1722	32.494	-6.002	14.203	1.00	32.16
	ATOM	2278	CA	PRO	1722	33.546	-5.692	16.362	1.00	35.84
	ATOM	2279	CB	PRO	1722	32.027	-5.682	16.473	1.00	35.35
	ATOM	2280	CG	PRO	1722	31.575	-5.255	15.108	1.00	35.35
	ATOM	2281	C	PRO	1722	34.105	-6.904	17.099	1.00	40.41
	ATOM	2282	O	PRO	1722	34.010	-8.038	16.607	1.00	41.14
	ATOM	2283	N	SER	1723	34.739	-6.680	18.240	1.00	43.60
30	ATOM	2285	CA	SER	1723	35.260	-7.808	18.999	1.00	45.51
	ATOM	2286	CB	SER	1723	36.078	-7.324	20.191	1.00	45.30
	ATOM	2287	OG	SER	1723	35.384	-6.300	20.879	1.00	49.62
	ATOM	2289	C	SER	1723	34.031	-8.589	19.460	1.00	46.39
	ATOM	2290	O	SER	1723	32.939	-8.028	19.614	1.00	45.16
	ATOM	2291	N	ASN	1724	34.199	-9.891	19.631	1.00	48.53
	ATOM	2293	CA	ASN	1724	33.088	-10.723	20.065	1.00	51.13
	ATOM	2294	CB	ASN	1724	32.509	-10.194	21.390	1.00	56.87
	ATOM	2295	CG	ASN	1724	33.595	-9.892	22.427	1.00	61.65
35	ATOM	2296	OD1	ASN	1724	34.503	-10.702	22.649	1.00	63.73
	ATOM	2297	ND2	ASN	1724	33.526	-8.713	23.039	1.00	64.64

	ATOM	2300	C	ASN	1724	32.034	-10.743	18.941	1.00	48.83
	ATOM	2301	O	ASN	1724	30.846	-10.534	19.145	1.00	50.50
	ATOM	2302	N	CYS	1725	32.511	-10.977	17.734	1.00	45.23
	ATOM	2304	CA	CYS	1725	31.654	-11.056	16.570	1.00	42.33
	ATOM	2305	CB	CYS	1725	31.570	-9.702	15.854	1.00	41.48
5	ATOM	2306	SG	CYS	1725	30.711	-9.751	14.275	1.00	40.38
	ATOM	2307	C	CYS	1725	32.383	-12.077	15.725	1.00	39.64
	ATOM	2308	O	CYS	1725	33.601	-12.004	15.579	1.00	42.00
	ATOM	2309	N	THR	1726	31.664	-13.090	15.263	1.00	35.96
	ATOM	2311	CA	THR	1726	32.275	-14.139	14.459	1.00	33.61
	ATOM	2312	CB	THR	1726	31.301	-15.326	14.326	1.00	33.29
	ATOM	2313	OG1	THR	1726	30.071	-14.904	13.711	1.00	34.53
	ATOM	2315	CG2	THR	1726	30.981	-15.861	15.696	1.00	25.84
	ATOM	2316	C	THR	1726	32.720	-13.629	13.092	1.00	32.27
10	ATOM	2317	O	THR	1726	32.257	-12.593	12.643	1.00	33.04
	ATOM	2318	N	ASN	1727	33.643	-14.315	12.434	1.00	32.98
	ATOM	2320	CA	ASN	1727	34.050	-13.850	11.114	1.00	34.97
	ATOM	2321	CB	ASN	1727	35.198	-14.680	10.541	1.00	39.89
	ATOM	2322	CG	ASN	1727	36.540	-14.271	11.103	1.00	45.37
	ATOM	2323	OD1	ASN	1727	37.044	-13.177	10.826	1.00	48.43
	ATOM	2324	ND2	ASN	1727	37.125	-15.141	11.909	1.00	45.88
	ATOM	2327	C	ASN	1727	32.846	-13.947	10.192	1.00	33.97
	ATOM	2328	O	ASN	1727	32.646	-13.088	9.341	1.00	35.07
15	ATOM	2329	N	GLU	1728	32.024	-14.973	10.414	1.00	31.69
	ATOM	2331	CA	GLU	1728	30.814	-15.210	9.620	1.00	30.27
	ATOM	2332	CB	GLU	1728	30.141	-16.493	10.083	1.00	32.53
	ATOM	2333	CG	GLU	1728	28.932	-16.878	9.273	1.00	32.81
	ATOM	2334	CD	GLU	1728	28.353	-18.190	9.711	1.00	36.43
	ATOM	2335	OE1	GLU	1728	28.339	-18.466	10.932	1.00	36.75
	ATOM	2336	OE2	GLU	1728	27.908	-18.945	8.829	1.00	41.92
	ATOM	2337	C	GLU	1728	29.814	-14.049	9.681	1.00	28.70
	ATOM	2338	O	GLU	1728	29.234	-13.655	8.660	1.00	28.51
20	ATOM	2339	N	LEU	1729	29.594	-13.517	10.880	1.00	26.77
	ATOM	2341	CA	LEU	1729	28.687	-12.393	11.040	1.00	26.80
	ATOM	2342	CB	LEU	1729	28.228	-12.274	12.490	1.00	27.91
	ATOM	2343	CG	LEU	1729	27.233	-13.355	12.913	1.00	30.71
	ATOM	2344	CD1	LEU	1729	27.095	-13.345	14.428	1.00	35.79
	ATOM	2345	CD2	LEU	1729	25.885	-13.141	12.253	1.00	25.70
	ATOM	2346	C	LEU	1729	29.319	-11.089	10.540	1.00	27.06
	ATOM	2347	O	LEU	1729	28.610	-10.177	10.126	1.00	30.27
	ATOM	2348	N	TYR	1730	30.650	-11.004	10.549	1.00	27.03
25	ATOM	2350	CA	TYR	1730	31.328	-9.812	10.039	1.00	26.21
	ATOM	2351	CB	TYR	1730	32.792	-9.778	10.474	1.00	25.31
	ATOM	2352	CG	TYR	1730	33.538	-8.553	9.982	1.00	24.89
	ATOM	2353	CD1	TYR	1730	33.012	-7.270	10.169	1.00	23.59
	ATOM	2354	CE1	TYR	1730	33.655	-6.148	9.665	1.00	24.74
	ATOM	2355	CD2	TYR	1730	34.739	-8.675	9.285	1.00	22.11
	ATOM	2356	CE2	TYR	1730	35.399	-7.560	8.775	1.00	22.32
	ATOM	2357	CZ	TYR	1730	34.853	-6.295	8.962	1.00	26.07
	ATOM	2358	OH	TYR	1730	35.484	-5.181	8.418	1.00	22.70
30	ATOM	2360	C	TYR	1730	31.227	-9.878	8.509	1.00	27.71
	ATOM	2361	O	TYR	1730	30.960	-8.875	7.843	1.00	28.05
	ATOM	2362	N	MET	1731	31.409	-11.081	7.977	1.00	27.92
	ATOM	2364	CA	MET	1731	31.306	-11.355	6.548	1.00	28.89
	ATOM	2365	CB	MET	1731	31.506	-12.853	6.317	1.00	35.84
	ATOM	2366	CG	MET	1731	31.068	-13.379	4.975	1.00	45.50
	ATOM	2367	SD	MET	1731	31.347	-15.167	4.865	1.00	56.40
	ATOM	2368	CE	MET	1731	32.106	-15.263	3.217	1.00	56.88
	ATOM	2369	C	MET	1731	29.916	-10.928	6.102	1.00	27.79
35	ATOM	2370	O	MET	1731	29.755	-10.345	5.041	1.00	30.68
	ATOM	2371	N	MET	1732	28.915	-11.203	6.932	1.00	28.02

	ATOM	2373	CA	MET	1732	27.546	-10.804	6.639	1.00	25.74
	ATOM	2374	CB	MET	1732	26.598	-11.317	7.718	1.00	24.94
	ATOM	2375	CG	MET	1732	25.153	-10.911	7.492	1.00	22.96
	ATOM	2376	SD	MET	1732	24.008	-11.593	8.684	1.00	24.39
	ATOM	2377	CE	MET	1732	23.798	-13.272	8.002	1.00	18.04
5	ATOM	2378	C	MET	1732	27.470	-9.273	6.559	1.00	25.81
	ATOM	2379	O	MET	1732	26.889	-8.729	5.620	1.00	26.85
	ATOM	2380	N	MET	1733	28.068	-8.587	7.537	1.00	24.84
	ATOM	2382	CA	MET	1733	28.092	-7.124	7.545	1.00	25.27
	ATOM	2383	CB	MET	1733	28.931	-6.600	8.700	1.00	25.97
	ATOM	2384	CG	MET	1733	28.342	-6.769	10.058	1.00	28.69
	ATOM	2385	SD	MET	1733	29.456	-6.094	11.295	1.00	29.06
	ATOM	2386	CE	MET	1733	28.927	-7.051	12.693	1.00	28.07
	ATOM	2387	C	MET	1733	28.741	-6.628	6.270	1.00	26.97
10	ATOM	2388	O	MET	1733	28.192	-5.771	5.581	1.00	28.37
	ATOM	2389	N	ARG	1734	29.922	-7.160	5.966	1.00	28.77
	ATOM	2391	CA	ARG	1734	30.664	-6.775	4.762	1.00	29.66
	ATOM	2392	CB	ARG	1734	32.027	-7.482	4.716	1.00	29.05
	ATOM	2393	CG	ARG	1734	32.968	-7.109	5.866	1.00	25.00
	ATOM	2394	CD	ARG	1734	33.247	-5.621	5.882	1.00	29.27
	ATOM	2395	NE	ARG	1734	33.911	-5.210	4.647	1.00	35.43
	ATOM	2397	CZ	ARG	1734	35.233	-5.220	4.466	1.00	38.24
	ATOM	2398	NH1	ARG	1734	36.054	-5.601	5.445	1.00	36.47
15	ATOM	2401	NH2	ARG	1734	35.732	-4.907	3.277	1.00	38.57
	ATOM	2404	C	ARG	1734	29.859	-7.034	3.478	1.00	29.57
	ATOM	2405	O	ARG	1734	29.920	-6.242	2.538	1.00	29.55
	ATOM	2406	N	ASP	1735	29.095	-8.124	3.448	1.00	28.07
	ATOM	2408	CA	ASP	1735	28.259	-8.423	2.287	1.00	27.96
	ATOM	2409	CB	ASP	1735	27.634	-9.813	2.408	1.00	28.60
	ATOM	2410	CG	ASP	1735	28.664	-10.926	2.283	1.00	31.34
	ATOM	2411	OD1	ASP	1735	29.785	-10.660	1.798	1.00	31.12
	ATOM	2412	OD2	ASP	1735	28.356	-12.068	2.687	1.00	36.07
20	ATOM	2413	C	ASP	1735	27.159	-7.368	2.155	1.00	27.24
	ATOM	2414	O	ASP	1735	26.846	-6.932	1.050	1.00	25.79
	ATOM	2415	N	CYS	1736	26.590	-6.951	3.288	1.00	26.53
	ATOM	2417	CA	CYS	1736	25.547	-5.930	3.314	1.00	24.35
	ATOM	2418	CB	CYS	1736	24.968	-5.765	4.731	1.00	22.01
	ATOM	2419	SG	CYS	1736	23.885	-7.101	5.281	1.00	21.52
	ATOM	2420	C	CYS	1736	26.119	-4.595	2.847	1.00	24.26
	ATOM	2421	O	CYS	1736	25.386	-3.725	2.368	1.00	24.19
	ATOM	2422	N	TRP	1737	27.432	-4.437	3.002	1.00	22.94
25	ATOM	2424	CA	TRP	1737	28.104	-3.210	2.605	1.00	21.91
	ATOM	2425	CB	TRP	1737	29.146	-2.820	3.640	1.00	19.26
	ATOM	2426	CG	TRP	1737	28.572	-2.493	4.947	1.00	20.89
	ATOM	2427	CD2	TRP	1737	29.226	-2.602	6.212	1.00	23.33
	ATOM	2428	CE2	TRP	1737	28.315	-2.159	7.196	1.00	21.59
	ATOM	2429	CE3	TRP	1737	30.506	-3.026	6.614	1.00	25.00
	ATOM	2430	CD1	TRP	1737	27.319	-2.012	5.201	1.00	19.90
	ATOM	2431	NE1	TRP	1737	27.158	-1.807	6.551	1.00	20.77
	ATOM	2433	CZ2	TRP	1737	28.641	-2.127	8.563	1.00	19.89
30	ATOM	2434	CZ3	TRP	1737	30.825	-2.993	7.971	1.00	21.23
	ATOM	2435	CH2	TRP	1737	29.896	-2.543	8.927	1.00	21.09
	ATOM	2436	C	TRP	1737	28.758	-3.266	1.232	1.00	23.54
	ATOM	2437	O	TRP	1737	29.653	-2.477	0.939	1.00	24.68
	ATOM	2438	N	HIS	1738	28.315	-4.185	0.382	1.00	24.37
	ATOM	2440	CA	HIS	1738	28.877	-4.287	-0.947	1.00	24.42
	ATOM	2441	CB	HIS	1738	28.243	-5.436	-1.728	1.00	23.72
	ATOM	2442	CG	HIS	1738	29.131	-5.985	-2.801	1.00	27.20
	ATOM	2443	CD2	HIS	1738	29.595	-5.425	-3.948	1.00	26.45
35	ATOM	2444	ND1	HIS	1738	29.681	-7.255	-2.751	1.00	29.26
	ATOM	2446	CE1	HIS	1738	30.436	-7.441	-3.816	1.00	29.25

	ATOM	2447	NE2	HIS	1738	30.409	-6.358	-4.556	1.00	27.32
	ATOM	2449	C	HIS	1738	28.716	-2.970	-1.713	1.00	25.82
	ATOM	2450	O	HIS	1738	27.675	-2.314	-1.660	1.00	23.96
	ATOM	2451	N	ALA	1739	29.802	-2.564	-2.362	1.00	26.27
5	ATOM	2453	CA	ALA	1739	29.825	-1.346	-3.158	1.00	25.46
	ATOM	2454	CB	ALA	1739	31.186	-1.180	-3.789	1.00	25.70
	ATOM	2455	C	ALA	1739	28.754	-1.443	-4.233	1.00	26.18
	ATOM	2456	O	ALA	1739	28.116	-0.455	-4.574	1.00	29.14
	ATOM	2457	N	VAL	1740	28.570	-2.643	-4.774	1.00	25.71
	ATOM	2459	CA	VAL	1740	27.560	-2.875	-5.802	1.00	26.12
	ATOM	2460	CB	VAL	1740	28.063	-3.841	-6.903	1.00	25.99
	ATOM	2461	CG1	VAL	1740	27.102	-3.832	-8.090	1.00	23.37
	ATOM	2462	CG2	VAL	1740	29.450	-3.440	-7.349	1.00	22.07
10	ATOM	2463	C	VAL	1740	26.247	-3.400	-5.191	1.00	25.43
	ATOM	2464	O	VAL	1740	26.186	-4.550	-4.704	1.00	24.93
	ATOM	2465	N	PRO	1741	25.170	-2.585	-5.265	1.00	24.20
	ATOM	2466	CD	PRO	1741	25.151	-1.277	-5.953	1.00	18.88
	ATOM	2467	CA	PRO	1741	23.838	-2.914	-4.734	1.00	25.28
	ATOM	2468	CB	PRO	1741	22.953	-1.788	-5.294	1.00	22.75
	ATOM	2469	CG	PRO	1741	23.903	-0.632	-5.398	1.00	20.99
	ATOM	2470	C	PRO	1741	23.299	-4.296	-5.128	1.00	25.84
	ATOM	2471	O	PRO	1741	22.787	-5.036	-4.280	1.00	25.99
15	ATOM	2472	N	SER	1742	23.425	-4.642	-6.407	1.00	26.48
	ATOM	2474	CA	SER	1742	22.942	-5.919	-6.930	1.00	25.19
	ATOM	2475	CB	SER	1742	23.151	-5.992	-8.440	1.00	25.68
	ATOM	2476	OG	SER	1742	24.530	-5.943	-8.769	1.00	27.46
	ATOM	2478	C	SER	1742	23.644	-7.100	-6.289	1.00	25.24
	ATOM	2479	O	SER	1742	23.124	-8.218	-6.300	1.00	26.09
	ATOM	2480	N	GLN	1743	24.826	-6.851	-5.731	1.00	23.88
	ATOM	2482	CA	GLN	1743	25.590	-7.917	-5.118	1.00	24.44
	ATOM	2483	CB	GLN	1743	27.069	-7.733	-5.437	1.00	27.26
	ATOM	2484	CG	GLN	1743	27.344	-7.784	-6.940	1.00	27.39
20	ATOM	2485	CD	GLN	1743	26.803	-9.047	-7.581	1.00	26.46
	ATOM	2486	OE1	GLN	1743	27.325	-10.136	-7.339	1.00	25.80
	ATOM	2487	NE2	GLN	1743	25.760	-8.914	-8.393	1.00	27.42
	ATOM	2490	C	GLN	1743	25.348	-8.151	-3.633	1.00	23.20
	ATOM	2491	O	GLN	1743	25.810	-9.147	-3.083	1.00	22.90
	ATOM	2492	N	ARG	1744	24.628	-7.243	-2.984	1.00	22.15
	ATOM	2494	CA	ARG	1744	24.318	-7.398	-1.568	1.00	21.23
	ATOM	2495	CB	ARG	1744	23.767	-6.088	-0.998	1.00	19.01
	ATOM	2496	CG	ARG	1744	24.705	-4.916	-1.145	1.00	17.27
25	ATOM	2497	CD	ARG	1744	24.091	-3.605	-0.679	1.00	14.79
	ATOM	2498	NE	ARG	1744	24.914	-2.493	-1.157	1.00	19.72
	ATOM	2500	CZ	ARG	1744	24.482	-1.258	-1.391	1.00	19.23
	ATOM	2501	NH1	ARG	1744	23.201	-0.931	-1.201	1.00	15.90
	ATOM	2504	NH2	ARG	1744	25.343	-0.343	-1.821	1.00	19.43
	ATOM	2507	C	ARG	1744	23.259	-8.496	-1.438	1.00	21.95
	ATOM	2508	O	ARG	1744	22.585	-8.827	-2.415	1.00	25.34
	ATOM	2509	N	PRO	1745	23.213	-9.184	-0.292	1.00	20.82
	ATOM	2510	CD	PRO	1745	24.191	-9.219	0.804	1.00	21.25
30	ATOM	2511	CA	PRO	1745	22.204	-10.229	-0.127	1.00	21.39
	ATOM	2512	CB	PRO	1745	22.687	-10.980	1.117	1.00	21.69
	ATOM	2513	CG	PRO	1745	23.418	-9.916	1.886	1.00	22.62
	ATOM	2514	C	PRO	1745	20.833	-9.585	0.102	1.00	22.15
	ATOM	2515	O	PRO	1745	20.739	-8.402	0.426	1.00	23.29
	ATOM	2516	N	THR	1746	19.771	-10.349	-0.109	1.00	20.93
	ATOM	2518	CA	THR	1746	18.440	-9.827	0.107	1.00	19.90
	ATOM	2519	CB	THR	1746	17.391	-10.554	-0.783	1.00	20.21
	ATOM	2520	OG1	THR	1746	17.484	-11.974	-0.584	1.00	22.03
35	ATOM	2522	CG2	THR	1746	17.609	-10.242	-2.255	1.00	20.82
	ATOM	2523	C	THR	1746	18.112	-10.095	1.557	1.00	19.77

	ATOM	2524	O	THR	1746	18.842	-10.823	2.228	1.00	19.19
	ATOM	2525	N	PHE	1747	17.010	-9.526	2.045	1.00	23.46
	ATOM	2527	CA	PHE	1747	16.582	-9.770	3.422	1.00	21.64
	ATOM	2528	CB	PHE	1747	15.473	-8.794	3.827	1.00	18.89
	ATOM	2529	CG	PHE	1747	15.987	-7.445	4.262	1.00	17.45
5	ATOM	2530	CD1	PHE	1747	16.757	-7.317	5.417	1.00	17.65
	ATOM	2531	CD2	PHE	1747	15.712	-6.303	3.516	1.00	15.37
	ATOM	2532	CE1	PHE	1747	17.242	-6.073	5.819	1.00	16.17
	ATOM	2533	CE2	PHE	1747	16.189	-5.056	3.907	1.00	14.53
	ATOM	2534	CZ	PHE	1747	16.959	-4.941	5.065	1.00	16.88
	ATOM	2535	C	PHE	1747	16.118	-11.227	3.522	1.00	23.18
	ATOM	2536	O	PHE	1747	16.271	-11.873	4.548	1.00	24.04
	ATOM	2537	N	LYS	1748	15.570	-11.745	2.432	1.00	24.13
	ATOM	2539	CA	LYS	1748	15.137	-13.132	2.385	1.00	26.35
10	ATOM	2540	CB	LYS	1748	14.502	-13.424	1.024	1.00	27.52
	ATOM	2541	CG	LYS	1748	14.034	-14.849	0.836	1.00	33.88
	ATOM	2542	CD	LYS	1748	13.598	-15.062	-0.600	1.00	41.83
	ATOM	2543	CE	LYS	1748	13.190	-16.506	-0.881	1.00	50.05
	ATOM	2544	NZ	LYS	1748	12.084	-16.986	0.005	1.00	55.70
	ATOM	2548	C	LYS	1748	16.359	-14.037	2.636	1.00	27.50
	ATOM	2549	O	LYS	1748	16.303	-14.950	3.459	1.00	31.18
	ATOM	2550	N	GLN	1749	17.467	-13.761	1.949	1.00	27.24
	ATOM	2552	CA	GLN	1749	18.699	-14.529	2.122	1.00	27.03
15	ATOM	2553	CB	GLN	1749	19.797	-14.039	1.169	1.00	31.80
	ATOM	2554	CG	GLN	1749	19.501	-14.196	-0.323	1.00	38.57
	ATOM	2555	CD	GLN	1749	20.460	-13.385	-1.209	1.00	39.93
	ATOM	2556	OE1	GLN	1749	20.025	-12.535	-1.974	1.00	39.90
	ATOM	2557	NE2	GLN	1749	21.768	-13.620	-1.068	1.00	40.23
	ATOM	2560	C	GLN	1749	19.205	-14.380	3.552	1.00	25.98
	ATOM	2561	O	GLN	1749	19.533	-15.371	4.198	1.00	27.18
	ATOM	2562	N	LEU	1750	19.293	-13.133	4.018	1.00	25.20
	ATOM	2564	CA	LEU	1750	19.774	-12.823	5.369	1.00	25.74
20	ATOM	2565	CB	LEU	1750	19.722	-11.317	5.631	1.00	20.99
	ATOM	2566	CG	LEU	1750	20.708	-10.468	4.831	1.00	20.90
	ATOM	2567	CD1	LEU	1750	20.302	-8.987	4.822	1.00	19.88
	ATOM	2568	CD2	LEU	1750	22.071	-10.643	5.426	1.00	17.26
	ATOM	2569	C	LEU	1750	18.985	-13.555	6.441	1.00	27.10
	ATOM	2570	O	LEU	1750	19.553	-14.094	7.392	1.00	27.89
	ATOM	2571	N	VAL	1751	17.672	-13.598	6.265	1.00	29.40
	ATOM	2573	CA	VAL	1751	16.798	-14.262	7.210	1.00	26.80
	ATOM	2574	CB	VAL	1751	15.324	-14.030	6.843	1.00	26.94
25	ATOM	2575	CG1	VAL	1751	14.429	-14.941	7.657	1.00	29.93
	ATOM	2576	CG2	VAL	1751	14.941	-12.575	7.117	1.00	24.10
	ATOM	2577	C	VAL	1751	17.136	-15.745	7.228	1.00	27.80
	ATOM	2578	O	VAL	1751	17.223	-16.359	8.285	1.00	26.77
	ATOM	2579	N	GLU	1752	17.408	-16.300	6.056	1.00	32.26
	ATOM	2581	CA	GLU	1752	17.749	-17.717	5.966	1.00	35.72
	ATOM	2582	CB	GLU	1752	17.721	-18.173	4.504	1.00	39.33
	ATOM	2583	CG	GLU	1752	16.306	-18.078	3.911	1.00	49.41
	ATOM	2584	CD	GLU	1752	16.209	-18.421	2.429	1.00	55.88
30	ATOM	2585	OE1	GLU	1752	15.141	-18.138	1.835	1.00	58.00
	ATOM	2586	OE2	GLU	1752	17.180	-18.978	1.863	1.00	61.03
	ATOM	2587	C	GLU	1752	19.093	-18.002	6.635	1.00	34.59
	ATOM	2588	O	GLU	1752	19.230	-18.975	7.393	1.00	33.95
	ATOM	2589	N	ASP	1753	20.057	-17.114	6.401	1.00	34.38
	ATOM	2591	CA	ASP	1753	21.393	-17.235	6.977	1.00	32.81
	ATOM	2592	CB	ASP	1753	22.338	-16.227	6.334	1.00	31.57
	ATOM	2593	CG	ASP	1753	22.628	-16.556	4.888	1.00	33.68
	ATOM	2594	OD1	ASP	1753	22.573	-17.755	4.536	1.00	35.14
35	ATOM	2595	OD2	ASP	1753	22.914	-15.624	4.104	1.00	34.44
	ATOM	2596	C	ASP	1753	21.378	-17.058	8.489	1.00	32.04

	ATOM	2597	O	ASP	1753	21.997	-17.837	9.214	1.00	31.21
	ATOM	2598	N	LEU	1754	20.648	-16.045	8.955	1.00	31.00
	ATOM	2600	CA	LEU	1754	20.528	-15.754	10.382	1.00	29.46
	ATOM	2601	CB	LEU	1754	19.822	-14.426	10.598	1.00	23.47
5	ATOM	2602	CG	LEU	1754	20.816	-13.309	10.318	1.00	23.58
	ATOM	2603	CD1	LEU	1754	20.114	-11.963	10.128	1.00	20.46
	ATOM	2604	CD2	LEU	1754	21.828	-13.282	11.462	1.00	19.18
	ATOM	2605	C	LEU	1754	19.806	-16.866	11.110	1.00	31.84
	ATOM	2606	O	LEU	1754	20.125	-17.178	12.254	1.00	30.78
	ATOM	2607	N	ASP	1755	18.832	-17.471	10.445	1.00	34.03
	ATOM	2609	CA	ASP	1755	18.116	-18.578	11.044	1.00	35.22
	ATOM	2610	CB	ASP	1755	16.973	-19.027	10.148	1.00	38.40
	ATOM	2611	CG	ASP	1755	16.159	-20.119	10.779	1.00	41.85
10	ATOM	2612	OD1	ASP	1755	15.560	-19.866	11.841	1.00	47.90
	ATOM	2613	OD2	ASP	1755	16.142	-21.241	10.238	1.00	46.67
	ATOM	2614	C	ASP	1755	19.114	-19.724	11.222	1.00	36.79
	ATOM	2615	O	ASP	1755	19.114	-20.411	12.250	1.00	38.33
	ATOM	2616	N	ARG	1756	19.973	-19.920	10.226	1.00	34.81
	ATOM	2618	CA	ARG	1756	20.982	-20.969	10.302	1.00	34.68
	ATOM	2619	CB	ARG	1756	21.688	-21.100	8.959	1.00	34.78
	ATOM	2620	CG	ARG	1756	22.746	-22.179	8.910	1.00	35.93
	ATOM	2621	CD	ARG	1756	23.297	-22.306	7.511	1.00	41.60
	ATOM	2622	NE	ARG	1756	23.786	-21.025	6.999	1.00	46.42
15	ATOM	2624	CZ	ARG	1756	24.889	-20.419	7.427	1.00	48.38
	ATOM	2625	NH1	ARG	1756	25.637	-20.976	8.381	1.00	48.10
	ATOM	2628	NH2	ARG	1756	25.236	-19.242	6.909	1.00	46.62
	ATOM	2631	C	ARG	1756	22.002	-20.666	11.399	1.00	36.17
	ATOM	2632	O	ARG	1756	22.372	-21.541	12.177	1.00	38.33
	ATOM	2633	N	ILE	1757	22.433	-19.413	11.478	1.00	37.00
	ATOM	2635	CA	ILE	1757	23.416	-18.998	12.468	1.00	35.60
	ATOM	2636	CB	ILE	1757	23.964	-17.588	12.141	1.00	35.54
20	ATOM	2637	CG2	ILE	1757	24.921	-17.131	13.217	1.00	32.41
	ATOM	2638	CG1	ILE	1757	24.693	-17.612	10.794	1.00	33.77
	ATOM	2639	CD1	ILE	1757	25.097	-16.253	10.287	1.00	33.49
	ATOM	2640	C	ILE	1757	22.866	-19.048	13.891	1.00	37.28
	ATOM	2641	O	ILE	1757	23.531	-19.556	14.779	1.00	38.42
	ATOM	2642	N	VAL	1758	21.634	-18.585	14.088	1.00	39.19
	ATOM	2644	CA	VAL	1758	21.016	-18.584	15.421	1.00	39.84
	ATOM	2645	CB	VAL	1758	19.560	-18.017	15.403	1.00	37.62
	ATOM	2646	CG1	VAL	1758	18.918	-18.144	16.773	1.00	38.30
	ATOM	2647	CG2	VAL	1758	19.560	-16.560	15.009	1.00	39.62
25	ATOM	2648	C	VAL	1758	20.983	-19.997	15.988	1.00	41.98
	ATOM	2649	O	VAL	1758	21.380	-20.229	17.128	1.00	43.36
	ATOM	2650	N	ALA	1759	20.501	-20.932	15.182	1.00	43.31
	ATOM	2652	CA	ALA	1759	20.418	-22.325	15.589	1.00	44.00
	ATOM	2653	CB	ALA	1759	19.836	-23.150	14.459	1.00	44.52
	ATOM	2654	C	ALA	1759	21.784	-22.867	15.976	1.00	45.98
	ATOM	2655	O	ALA	1759	21.894	-23.725	16.841	1.00	48.78
	ATOM	2656	N	LEU	1760	22.823	-22.375	15.319	1.00	48.93
30	ATOM	2658	CA	LEU	1760	24.175	-22.831	15.592	1.00	51.47
	ATOM	2659	CB	LEU	1760	24.954	-22.900	14.280	1.00	53.63
	ATOM	2660	CG	LEU	1760	24.284	-23.864	13.295	1.00	57.84
	ATOM	2661	CD1	LEU	1760	24.993	-23.847	11.948	1.00	61.83
	ATOM	2662	CD2	LEU	1760	24.260	-25.277	13.886	1.00	58.57
	ATOM	2663	C	LEU	1760	24.911	-21.965	16.607	1.00	53.60
	ATOM	2664	O	LEU	1760	26.078	-22.214	16.919	1.00	54.00
	ATOM	2665	N	THR	1761	24.222	-20.963	17.141	1.00	55.77
	ATOM	2667	CA	THR	1761	24.820	-20.060	18.111	1.00	56.64
	ATOM	2668	CB	THR	1761	24.250	-18.627	17.979	1.00	55.76
35	ATOM	2669	OG1	THR	1761	24.444	-18.154	16.644	1.00	56.20
	ATOM	2671	CG2	THR	1761	24.962	-17.680	18.917	1.00	55.25

	ATOM	2672	C	THR	1761	24.636	-20.548	19.539	1.00	58.16
	ATOM	2673	O	THR	1761	23.566	-21.021	19.919	1.00	56.85
	ATOM	2674	N	SER	1762	25.706	-20.436	20.318	1.00	61.74
	ATOM	2676	CA	SER	1762	25.706	-20.833	21.717	1.00	64.50
	ATOM	2677	CB	SER	1762	27.155	-20.979	22.205	1.00	68.82
5	ATOM	2678	OG	SER	1762	27.232	-21.544	23.508	1.00	73.15
	ATOM	2680	C	SER	1762	24.965	-19.775	22.547	1.00	63.87
	ATOM	2681	O	SER	1762	25.080	-18.563	22.296	1.00	63.22
	ATOM	3420	PA	PCP	400	62.748	10.301	7.817	1.00	90.90
	ATOM	3421	O1A	PCP	400	62.509	10.036	9.280	1.00	92.35
	ATOM	3422	O2A	PCP	400	61.832	11.180	7.038	1.00	90.49
	ATOM	3423	O5*	PCP	400	62.744	8.904	7.142	1.00	83.57
	ATOM	3424	PB	PCP	400	65.226	11.946	8.294	1.00	101.51
	ATOM	3425	O1B	PCP	400	65.246	13.015	7.264	1.00	102.85
10	ATOM	3426	O2B	PCP	400	66.527	11.458	8.830	1.00	99.88
	ATOM	3427	O3A	PCP	400	64.334	10.725	7.584	1.00	96.64
	ATOM	3428	C3B	PCP	400	64.345	12.502	9.635	1.00	102.94
	ATOM	3429	C5*	PCP	400	62.337	8.684	5.839	1.00	71.21
	ATOM	3430	C4*	PCP	400	62.479	7.204	5.587	1.00	64.48
	ATOM	3431	O4*	PCP	400	63.713	6.745	6.169	1.00	60.91
	ATOM	3432	C1*	PCP	400	63.394	5.459	6.680	1.00	54.96
	ATOM	3433	N9	PCP	400	64.326	5.101	7.712	1.00	47.26
	ATOM	3434	C4	PCP	400	65.017	3.903	7.840	1.00	46.24
15	ATOM	3435	N3	PCP	400	64.926	2.770	7.062	1.00	41.02
	ATOM	3436	C2	PCP	400	65.802	1.878	7.531	1.00	40.72
	ATOM	3437	N1	PCP	400	66.674	1.917	8.558	1.00	37.37
	ATOM	3438	C6	PCP	400	66.735	3.028	9.305	1.00	40.23
	ATOM	3439	N6	PCP	400	67.573	3.134	10.333	1.00	33.92
	ATOM	3442	C5	PCP	400	65.862	4.091	8.937	1.00	44.12
	ATOM	3443	N7	PCP	400	65.674	5.361	9.472	1.00	45.15
	ATOM	3444	C8	PCP	400	64.761	5.894	8.702	1.00	44.83
	ATOM	3445	C2*	PCP	400	61.986	5.500	7.254	1.00	57.63
20	ATOM	3446	O2*	PCP	400	61.454	4.153	7.211	1.00	56.45
	ATOM	3448	C3*	PCP	400	61.328	6.402	6.245	1.00	61.31
	ATOM	3449	O3*	PCP	400	60.689	5.644	5.206	1.00	64.65
	ATOM	3451	PA	PCP	401	9.366	9.801	17.743	0.50	74.43
	ATOM	3452	O1A	PCP	401	9.463	8.736	16.709	0.50	75.37
	ATOM	3453	O2A	PCP	401	10.330	10.926	17.699	0.50	75.86
	ATOM	3454	O5*	PCP	401	9.427	9.108	19.186	0.50	67.44
	ATOM	3455	PB	PCP	401	6.878	10.679	16.547	0.50	82.27
	ATOM	3456	O1B	PCP	401	6.223	11.982	16.778	0.50	82.91
25	ATOM	3457	O2B	PCP	401	6.020	9.486	16.408	0.50	82.70
	ATOM	3458	O3A	PCP	401	7.868	10.423	17.814	0.50	78.30
	ATOM	3459	C3B	PCP	401	7.790	10.845	15.159	0.50	82.50
	ATOM	3460	C5*	PCP	401	10.184	9.593	20.275	0.50	54.44
	ATOM	3461	C4*	PCP	401	10.228	8.637	21.442	0.50	45.38
	ATOM	3462	O4*	PCP	401	9.032	7.855	21.412	0.50	39.40
	ATOM	3463	C1*	PCP	401	9.397	6.509	21.641	0.50	35.00
	ATOM	3464	N9	PCP	401	8.386	5.627	21.044	0.50	27.91
	ATOM	3465	C4	PCP	401	7.790	4.469	21.564	0.50	23.36
30	ATOM	3466	N3	PCP	401	7.982	3.849	22.732	0.50	22.33
	ATOM	3467	C2	PCP	401	7.239	2.768	22.838	0.50	20.26
	ATOM	3468	N1	PCP	401	6.382	2.251	22.003	0.50	17.29
	ATOM	3469	C6	PCP	401	6.202	2.877	20.856	0.50	19.35
	ATOM	3470	N6	PCP	401	5.327	2.415	19.975	0.50	16.87
	ATOM	3473	C5	PCP	401	6.932	4.038	20.603	0.50	21.72
	ATOM	3474	N7	PCP	401	6.983	4.880	19.507	0.50	24.59
	ATOM	3475	C8	PCP	401	7.847	5.786	19.832	0.50	24.26
	ATOM	3476	C2*	PCP	401	10.762	6.409	20.931	0.50	39.01
35	ATOM	3477	O2*	PCP	401	11.609	5.326	21.412	0.50	43.88
	ATOM	3479	C3*	PCP	401	11.396	7.674	21.373	0.50	42.14

	ATOM	3480	O3*	PCP	401	11.918	7.515	22.681	0.50	44.21
	ATOM	3482	N	SER	461	78.844	26.057	14.057	1.00	43.87
	ATOM	3484	CA	SER	461	79.399	24.884	13.385	1.00	43.50
	ATOM	3485	CB	SER	461	78.488	23.655	13.616	1.00	39.99
5	ATOM	3486	C	SER	461	79.572	25.181	11.888	1.00	42.14
	ATOM	3487	O	SER	461	79.473	24.292	11.038	1.00	40.29
	ATOM	3488	N	GLU	462	79.883	26.441	11.594	1.00	43.19
	ATOM	3490	CA	GLU	462	80.061	26.951	10.233	1.00	42.77
	ATOM	3491	CB	GLU	462	80.303	28.446	10.250	1.00	47.75
	ATOM	3492	CG	GLU	462	79.209	29.301	10.860	1.00	60.57
	ATOM	3493	CD	GLU	462	79.647	30.752	11.061	1.00	67.56
	ATOM	3494	OE1	GLU	462	80.866	31.016	10.994	1.00	67.47
	ATOM	3495	OE2	GLU	462	78.764	31.611	11.296	1.00	72.32
10	ATOM	3496	C	GLU	462	81.207	26.357	9.457	1.00	39.55
	ATOM	3497	O	GLU	462	81.051	26.032	8.292	1.00	38.74
	ATOM	3498	N	TYR	463	82.375	26.299	10.091	1.00	36.47
	ATOM	3500	CA	TYR	463	83.567	25.806	9.420	1.00	34.19
	ATOM	3501	CB	TYR	463	84.702	26.828	9.505	1.00	35.55
	ATOM	3502	CG	TYR	463	84.393	28.059	8.675	1.00	42.11
	ATOM	3503	CD1	TYR	463	84.004	29.264	9.283	1.00	43.15
	ATOM	3504	CE1	TYR	463	83.619	30.361	8.513	1.00	42.40
	ATOM	3505	CD2	TYR	463	84.395	27.990	7.280	1.00	39.78
	ATOM	3506	CE2	TYR	463	84.012	29.078	6.509	1.00	39.04
15	ATOM	3507	CZ	TYR	463	83.625	30.256	7.129	1.00	39.86
	ATOM	3508	OH	TYR	463	83.260	31.330	6.366	1.00	42.58
	ATOM	3510	C	TYR	463	84.055	24.434	9.800	1.00	33.28
	ATOM	3511	O	TYR	463	84.739	23.781	9.005	1.00	33.47
	ATOM	3512	N	GLU	464	83.695	23.976	10.993	1.00	34.42
	ATOM	3514	CA	GLU	464	84.117	22.660	11.444	1.00	36.38
	ATOM	3515	CB	GLU	464	85.618	22.663	11.750	1.00	40.90
	ATOM	3516	CG	GLU	464	86.041	23.755	12.729	1.00	46.29
	ATOM	3517	CD	GLU	464	87.548	23.810	12.943	1.00	51.33
20	ATOM	3518	OE1	GLU	464	87.970	24.247	14.038	1.00	54.49
	ATOM	3519	OE2	GLU	464	88.312	23.430	12.025	1.00	53.18
	ATOM	3520	C	GLU	464	83.374	22.224	12.678	1.00	35.64
	ATOM	3521	O	GLU	464	83.111	23.052	13.555	1.00	37.40
	ATOM	3522	N	LEU	465	82.962	20.955	12.711	1.00	34.21
	ATOM	3524	CA	LEU	465	82.267	20.429	13.887	1.00	34.92
	ATOM	3525	CB	LEU	465	81.285	19.300	13.542	1.00	31.30
	ATOM	3526	CG	LEU	465	80.272	19.381	12.405	1.00	32.22
	ATOM	3527	CD1	LEU	465	79.152	18.407	12.720	1.00	21.95
25	ATOM	3528	CD2	LEU	465	79.738	20.802	12.212	1.00	29.75
	ATOM	3529	C	LEU	465	83.326	19.855	14.814	1.00	36.17
	ATOM	3530	O	LEU	465	84.473	19.621	14.400	1.00	35.80
	ATOM	3531	N	PRO	466	82.970	19.629	16.083	1.00	36.20
	ATOM	3532	CD	PRO	466	81.722	20.018	16.758	1.00	38.17
	ATOM	3533	CA	PRO	466	83.925	19.072	17.037	1.00	36.06
	ATOM	3534	CB	PRO	466	83.132	19.035	18.333	1.00	35.57
	ATOM	3535	CG	PRO	466	82.185	20.194	18.171	1.00	38.67
	ATOM	3536	C	PRO	466	84.294	17.666	16.605	1.00	37.06
30	ATOM	3537	O	PRO	466	83.498	16.959	15.979	1.00	34.50
	ATOM	3538	N	GLU	467	85.504	17.258	16.936	1.00	39.97
	ATOM	3540	CA	GLU	467	85.951	15.932	16.587	1.00	44.69
	ATOM	3541	CB	GLU	467	87.412	15.985	16.151	1.00	50.43
	ATOM	3542	CG	GLU	467	87.902	14.695	15.518	1.00	60.27
	ATOM	3543	CD	GLU	467	89.321	14.796	14.986	1.00	65.75
	ATOM	3544	OE1	GLU	467	90.024	15.804	15.269	1.00	64.40
	ATOM	3545	OE2	GLU	467	89.726	13.850	14.275	1.00	71.13
	ATOM	3546	C	GLU	467	85.775	15.002	17.783	1.00	43.30
35	ATOM	3547	O	GLU	467	85.888	15.428	18.936	1.00	43.26
	ATOM	3548	N	ASP	468	85.433	13.750	17.504	1.00	43.09

	ATOM	3550	CA	ASP	468	85.254	12.739	18.545	1.00	44.15
	ATOM	3551	CB	ASP	468	83.785	12.614	18.979	1.00	44.54
	ATOM	3552	CG	ASP	468	83.574	11.562	20.072	1.00	41.84
	ATOM	3553	OD1	ASP	468	82.405	11.244	20.368	1.00	39.81
5	ATOM	3554	OD2	ASP	468	84.570	11.057	20.636	1.00	42.92
	ATOM	3555	C	ASP	468	85.746	11.422	17.970	1.00	44.66
	ATOM	3556	O	ASP	468	84.982	10.663	17.368	1.00	44.56
	ATOM	3557	N	PRO	469	87.034	11.126	18.176	1.00	44.56
	ATOM	3558	CD	PRO	469	87.953	11.959	18.971	1.00	45.43
	ATOM	3559	CA	PRO	469	87.707	9.916	17.707	1.00	43.90
	ATOM	3560	CB	PRO	469	89.024	9.959	18.476	1.00	45.66
	ATOM	3561	CG	PRO	469	89.300	11.438	18.547	1.00	44.89
	ATOM	3562	C	PRO	469	86.934	8.627	17.971	1.00	42.60
	ATOM	3563	O	PRO	469	86.935	7.730	17.139	1.00	41.35
10	ATOM	3564	N	ARG	470	86.229	8.569	19.096	1.00	43.25
	ATOM	3566	CA	ARG	470	85.460	7.380	19.470	1.00	44.81
	ATOM	3567	CB	ARG	470	84.722	7.612	20.789	1.00	48.36
	ATOM	3568	CG	ARG	470	85.579	8.201	21.889	1.00	53.41
	ATOM	3569	CD	ARG	470	84.764	8.458	23.138	1.00	55.42
	ATOM	3570	NE	ARG	470	83.581	9.261	22.861	1.00	58.57
	ATOM	3572	CZ	ARG	470	82.748	9.712	23.791	1.00	62.24
	ATOM	3573	NH1	ARG	470	82.972	9.445	25.077	1.00	64.57
	ATOM	3576	NH2	ARG	470	81.670	10.398	23.436	1.00	63.66
15	ATOM	3579	C	ARG	470	84.439	6.924	18.437	1.00	43.69
	ATOM	3580	O	ARG	470	84.166	5.735	18.313	1.00	45.68
	ATOM	3581	N	TRP	471	83.879	7.866	17.693	1.00	42.41
	ATOM	3583	CA	TRP	471	82.851	7.534	16.720	1.00	38.92
	ATOM	3584	CB	TRP	471	81.577	8.268	17.095	1.00	35.80
	ATOM	3585	CG	TRP	471	80.967	7.741	18.335	1.00	37.13
	ATOM	3586	CD2	TRP	471	80.158	6.569	18.443	1.00	37.26
	ATOM	3587	CE2	TRP	471	79.723	6.483	19.785	1.00	38.20
	ATOM	3588	CE3	TRP	471	79.748	5.582	17.530	1.00	35.59
20	ATOM	3589	CD1	TRP	471	81.010	8.300	19.584	1.00	36.42
	ATOM	3590	NE1	TRP	471	80.260	7.553	20.462	1.00	35.89
	ATOM	3592	CZ2	TRP	471	78.896	5.454	20.239	1.00	36.18
	ATOM	3593	CZ3	TRP	471	78.934	4.561	17.978	1.00	32.81
	ATOM	3594	CH2	TRP	471	78.514	4.505	19.321	1.00	34.82
	ATOM	3595	C	TRP	471	83.175	7.845	15.277	1.00	39.77
	ATOM	3596	O	TRP	471	82.478	7.391	14.362	1.00	39.56
	ATOM	3597	N	GLU	472	84.224	8.628	15.075	1.00	39.37
	ATOM	3599	CA	GLU	472	84.605	9.043	13.739	1.00	38.42
25	ATOM	3600	CB	GLU	472	85.794	9.994	13.812	1.00	37.11
	ATOM	3601	CG	GLU	472	85.958	10.849	12.582	1.00	34.11
	ATOM	3602	CD	GLU	472	84.772	11.757	12.338	1.00	34.03
	ATOM	3603	OE1	GLU	472	84.260	12.348	13.317	1.00	31.87
	ATOM	3604	OE2	GLU	472	84.367	11.885	11.163	1.00	32.11
	ATOM	3605	C	GLU	472	84.910	7.901	12.791	1.00	39.78
	ATOM	3606	O	GLU	472	85.656	6.975	13.128	1.00	41.64
	ATOM	3607	N	LEU	473	84.303	7.958	11.610	1.00	37.71
	ATOM	3609	CA	LEU	473	84.538	6.957	10.590	1.00	36.94
30	ATOM	3610	CB	LEU	473	83.258	6.196	10.265	1.00	35.38
	ATOM	3611	CG	LEU	473	83.438	5.065	9.236	1.00	37.67
	ATOM	3612	CD1	LEU	473	84.070	3.845	9.903	1.00	37.28
	ATOM	3613	CD2	LEU	473	82.106	4.687	8.598	1.00	37.87
	ATOM	3614	C	LEU	473	85.035	7.664	9.330	1.00	39.31
	ATOM	3615	O	LEU	473	84.484	8.697	8.938	1.00	40.55
	ATOM	3616	N	PRO	474	86.140	7.164	8.732	1.00	39.20
	ATOM	3617	CD	PRO	474	87.052	6.170	9.327	1.00	37.83
	ATOM	3618	CA	PRO	474	86.735	7.716	7.513	1.00	38.53
35	ATOM	3619	CB	PRO	474	87.914	6.777	7.282	1.00	37.16
	ATOM	3620	CG	PRO	474	88.355	6.488	8.644	1.00	34.42

	ATOM	3621	C	PRO	474	85.733	7.607	6.370	1.00	40.25
	ATOM	3622	O	PRO	474	85.220	6.523	6.098	1.00	40.70
	ATOM	3623	N	ARG	475	85.492	8.723	5.685	1.00	41.09
	ATOM	3625	CA	ARG	475	84.534	8.746	4.590	1.00	42.26
	ATOM	3626	CB	ARG	475	84.487	10.132	3.948	1.00	39.19
5	ATOM	3627	CG	ARG	475	83.957	11.199	4.876	1.00	35.19
	ATOM	3628	CD	ARG	475	84.074	12.593	4.301	1.00	30.76
	ATOM	3629	NE	ARG	475	83.796	13.567	5.345	1.00	22.86
	ATOM	3631	CZ	ARG	475	82.581	13.898	5.748	1.00	21.99
	ATOM	3632	NH1	ARG	475	81.529	13.350	5.165	1.00	23.39
	ATOM	3635	NH2	ARG	475	82.412	14.662	6.813	1.00	22.55
	ATOM	3638	C	ARG	475	84.838	7.692	3.538	1.00	45.38
	ATOM	3639	O	ARG	475	83.927	7.182	2.892	1.00	47.15
10	ATOM	3640	N	ASP	476	86.106	7.319	3.390	1.00	47.13
	ATOM	3642	CA	ASP	476	86.461	6.325	2.387	1.00	51.33
	ATOM	3643	CB	ASP	476	87.973	6.294	2.134	1.00	55.23
	ATOM	3644	CG	ASP	476	88.768	5.841	3.340	1.00	61.16
	ATOM	3645	OD1	ASP	476	88.863	4.617	3.573	1.00	65.55
	ATOM	3646	OD2	ASP	476	89.331	6.713	4.036	1.00	65.78
	ATOM	3647	C	ASP	476	85.932	4.940	2.746	1.00	52.35
	ATOM	3648	O	ASP	476	85.815	4.063	1.885	1.00	55.49
	ATOM	3649	N	ARG	477	85.609	4.752	4.021	1.00	50.77
15	ATOM	3651	CA	ARG	477	85.080	3.482	4.508	1.00	48.65
	ATOM	3652	CB	ARG	477	85.612	3.208	5.908	1.00	50.02
	ATOM	3653	CG	ARG	477	87.067	2.799	5.881	1.00	55.33
	ATOM	3654	CD	ARG	477	87.760	3.030	7.201	1.00	60.38
	ATOM	3655	NE	ARG	477	87.238	2.207	8.285	1.00	64.36
	ATOM	3657	CZ	ARG	477	87.748	2.203	9.513	1.00	69.16
	ATOM	3658	NH1	ARG	477	88.794	2.968	9.814	1.00	70.73
	ATOM	3661	NH2	ARG	477	87.190	1.459	10.459	1.00	71.59
	ATOM	3664	C	ARG	477	83.546	3.414	4.484	1.00	46.25
	ATOM	3665	O	ARG	477	82.957	2.481	5.013	1.00	46.36
20	ATOM	3666	N	LEU	478	82.913	4.372	3.815	1.00	42.23
	ATOM	3668	CA	LEU	478	81.464	4.418	3.743	1.00	38.89
	ATOM	3669	CB	LEU	478	80.938	5.537	4.657	1.00	37.17
	ATOM	3670	CG	LEU	478	79.418	5.733	4.678	1.00	34.13
	ATOM	3671	CD1	LEU	478	78.777	4.723	5.609	1.00	32.24
	ATOM	3672	CD2	LEU	478	79.074	7.133	5.101	1.00	33.15
	ATOM	3673	C	LEU	478	81.059	4.697	2.303	1.00	38.34
	ATOM	3674	O	LEU	478	81.515	5.671	1.711	1.00	40.88
	ATOM	3675	N	VAL	479	80.208	3.850	1.738	1.00	37.34
25	ATOM	3677	CA	VAL	479	79.763	4.042	0.364	1.00	37.61
	ATOM	3678	CB	VAL	479	80.105	2.829	-0.563	1.00	36.57
	ATOM	3679	CG1	VAL	479	79.647	3.105	-1.994	1.00	31.59
	ATOM	3680	CG2	VAL	479	81.608	2.567	-0.561	1.00	36.11
	ATOM	3681	C	VAL	479	78.267	4.277	0.375	1.00	39.24
	ATOM	3682	O	VAL	479	77.484	3.358	0.619	1.00	39.16
	ATOM	3683	N	LEU	480	77.894	5.528	0.142	1.00	41.32
	ATOM	3685	CA	LEU	480	76.505	5.960	0.123	1.00	41.60
	ATOM	3686	CB	LEU	480	76.446	7.480	-0.008	1.00	41.31
30	ATOM	3687	CG	LEU	480	77.129	8.257	1.118	1.00	39.82
	ATOM	3688	CD1	LEU	480	76.985	9.737	0.856	1.00	37.96
	ATOM	3689	CD2	LEU	480	76.512	7.887	2.458	1.00	37.70
	ATOM	3690	C	LEU	480	75.733	5.312	-1.015	1.00	41.85
	ATOM	3691	O	LEU	480	76.235	5.224	-2.131	1.00	45.02
	ATOM	3692	N	GLY	481	74.501	4.897	-0.727	1.00	40.86
	ATOM	3694	CA	GLY	481	73.673	4.247	-1.727	1.00	40.21
	ATOM	3695	C	GLY	481	72.270	4.806	-1.873	1.00	39.78
	ATOM	3696	O	GLY	481	72.058	6.015	-1.810	1.00	41.68
35	ATOM	3697	N	LYS	482	71.306	3.914	-2.063	1.00	39.98
	ATOM	3699	CA	LYS	482	69.910	4.297	-2.249	1.00	42.13

	ATOM	3700	CB	LYS	482	69.061	3.056	-2.566	1.00	42.73
	ATOM	3701	C	LYS	482	69.284	5.050	-1.084	1.00	43.13
	ATOM	3702	O	LYS	482	69.373	4.625	0.060	1.00	44.49
	ATOM	3703	N	PRO	483	68.676	6.204	-1.358	1.00	43.22
	ATOM	3704	CD	PRO	483	68.708	6.969	-2.613	1.00	44.40
5	ATOM	3705	CA	PRO	483	68.044	6.973	-0.290	1.00	45.44
	ATOM	3706	CB	PRO	483	67.701	8.295	-0.980	1.00	45.01
	ATOM	3707	CG	PRO	483	67.573	7.923	-2.414	1.00	43.95
	ATOM	3708	C	PRO	483	66.801	6.261	0.232	1.00	47.67
	ATOM	3709	O	PRO	483	66.012	5.725	-0.547	1.00	46.76
	ATOM	3710	N	LEU	484	66.650	6.242	1.552	1.00	49.68
	ATOM	3712	CA	LEU	484	65.514	5.598	2.196	1.00	54.51
	ATOM	3713	CB	LEU	484	65.935	5.026	3.555	1.00	52.70
	ATOM	3714	CG	LEU	484	67.132	4.066	3.530	1.00	51.83
10	ATOM	3715	CD1	LEU	484	67.620	3.766	4.933	1.00	50.19
	ATOM	3716	CD2	LEU	484	66.755	2.788	2.825	1.00	52.22
	ATOM	3717	C	LEU	484	64.317	6.554	2.357	1.00	58.82
	ATOM	3718	O	LEU	484	63.158	6.138	2.244	1.00	60.07
	ATOM	3719	N	GLY	485	64.599	7.831	2.609	1.00	61.91
	ATOM	3721	CA	GLY	485	63.538	8.810	2.778	1.00	65.89
	ATOM	3722	C	GLY	485	64.057	10.167	3.227	1.00	69.46
	ATOM	3723	O	GLY	485	65.230	10.301	3.597	1.00	70.65
	ATOM	3724	N	GLU	486	63.178	11.165	3.241	1.00	70.72
15	ATOM	3726	CA	GLU	486	63.563	12.521	3.624	1.00	71.32
	ATOM	3727	CB	GLU	486	64.015	13.298	2.389	1.00	73.69
	ATOM	3728	C	GLU	486	62.435	13.269	4.312	1.00	70.93
	ATOM	3729	O	GLU	486	61.281	12.846	4.275	1.00	71.58
	ATOM	3730	N	GLY	487	62.781	14.404	4.909	1.00	70.10
	ATOM	3732	CA	GLY	487	61.798	15.211	5.603	1.00	68.11
	ATOM	3733	C	GLY	487	62.218	16.669	5.598	1.00	67.97
	ATOM	3734	O	GLY	487	62.938	17.109	4.696	1.00	67.68
	ATOM	3735	N	ALA	488	61.780	17.409	6.615	1.00	67.26
20	ATOM	3737	CA	ALA	488	62.106	18.826	6.737	1.00	66.90
	ATOM	3738	CB	ALA	488	61.362	19.428	7.909	1.00	68.72
	ATOM	3739	C	ALA	488	63.607	19.004	6.921	1.00	67.08
	ATOM	3740	O	ALA	488	64.124	18.867	8.037	1.00	65.97
	ATOM	3741	N	PHE	489	64.297	19.248	5.806	1.00	66.76
	ATOM	3743	CA	PHE	489	65.754	19.439	5.773	1.00	65.91
	ATOM	3744	CB	PHE	489	66.134	20.794	6.379	1.00	66.45
	ATOM	3745	C	PHE	489	66.563	18.288	6.414	1.00	63.92
	ATOM	3746	O	PHE	489	67.622	18.503	7.031	1.00	63.16
25	ATOM	3747	N	GLY	490	66.067	17.069	6.209	1.00	59.03
	ATOM	3749	CA	GLY	490	66.710	15.878	6.720	1.00	51.12
	ATOM	3750	C	GLY	490	66.619	14.823	5.638	1.00	48.59
	ATOM	3751	O	GLY	490	65.608	14.736	4.938	1.00	45.25
	ATOM	3752	N	GLN	491	67.659	14.003	5.525	1.00	48.77
	ATOM	3754	CA	GLN	491	67.732	12.951	4.519	1.00	47.40
	ATOM	3755	CB	GLN	491	68.529	13.474	3.319	1.00	49.92
	ATOM	3756	CG	GLN	491	68.653	12.514	2.155	1.00	56.31
	ATOM	3757	CD	GLN	491	69.604	13.020	1.088	1.00	58.79
30	ATOM	3758	OE1	GLN	491	70.043	14.171	1.130	1.00	59.63
	ATOM	3759	NE2	GLN	491	69.929	12.161	0.122	1.00	59.05
	ATOM	3762	C	GLN	491	68.407	11.693	5.086	1.00	44.46
	ATOM	3763	O	GLN	491	69.396	11.782	5.806	1.00	44.15
	ATOM	3764	N	VAL	492	67.867	10.527	4.752	1.00	42.55
	ATOM	3766	CA	VAL	492	68.416	9.247	5.205	1.00	39.22
	ATOM	3767	CB	VAL	492	67.375	8.458	6.042	1.00	39.40
	ATOM	3768	CG1	VAL	492	67.947	7.127	6.524	1.00	40.17
	ATOM	3769	CG2	VAL	492	66.922	9.267	7.210	1.00	36.12
35	ATOM	3770	C	VAL	492	68.746	8.396	3.975	1.00	37.57
	ATOM	3771	O	VAL	492	67.888	8.178	3.115	1.00	35.70

	ATOM	3772	N	VAL	493	69.990	7.961	3.845	1.00	36.27
	ATOM	3774	CA	VAL	493	70.333	7.127	2.711	1.00	37.61
	ATOM	3775	CB	VAL	493	71.237	7.863	1.643	1.00	37.45
	ATOM	3776	CG1	VAL	493	70.836	9.319	1.524	1.00	38.29
	ATOM	3777	CG2	VAL	493	72.717	7.713	1.943	1.00	36.53
5	ATOM	3778	C	VAL	493	70.952	5.806	3.156	1.00	37.54
	ATOM	3779	O	VAL	493	71.542	5.711	4.233	1.00	37.32
	ATOM	3780	N	LEU	494	70.691	4.763	2.380	1.00	37.67
	ATOM	3782	CA	LEU	494	71.236	3.450	2.656	1.00	38.41
	ATOM	3783	CB	LEU	494	70.482	2.387	1.851	1.00	39.16
	ATOM	3784	CG	LEU	494	70.834	0.908	2.021	1.00	36.43
	ATOM	3785	CD1	LEU	494	70.809	0.508	3.479	1.00	34.69
	ATOM	3786	CD2	LEU	494	69.840	0.086	1.229	1.00	37.48
	ATOM	3787	C	LEU	494	72.683	3.541	2.202	1.00	39.30
10	ATOM	3788	O	LEU	494	72.976	4.201	1.207	1.00	39.21
	ATOM	3789	N	ALA	495	73.584	2.922	2.954	1.00	40.08
	ATOM	3791	CA	ALA	495	74.996	2.954	2.619	1.00	41.70
	ATOM	3792	CB	ALA	495	75.654	4.162	3.283	1.00	41.63
	ATOM	3793	C	ALA	495	75.670	1.669	3.080	1.00	43.92
	ATOM	3794	O	ALA	495	75.033	0.818	3.711	1.00	45.20
	ATOM	3795	N	GLU	496	76.946	1.515	2.731	1.00	44.21
	ATOM	3797	CA	GLU	496	77.712	0.347	3.137	1.00	43.44
	ATOM	3798	CB	GLU	496	78.046	-0.538	1.943	1.00	45.87
15	ATOM	3799	CG	GLU	496	76.816	-1.142	1.301	1.00	53.11
	ATOM	3800	CD	GLU	496	77.145	-2.262	0.339	1.00	56.68
	ATOM	3801	OE1	GLU	496	76.473	-3.316	0.410	1.00	61.87
	ATOM	3802	OE2	GLU	496	78.068	-2.091	-0.482	1.00	58.18
	ATOM	3803	C	GLU	496	78.973	0.773	3.860	1.00	40.97
	ATOM	3804	O	GLU	496	79.835	1.437	3.302	1.00	40.91
	ATOM	3805	N	ALA	497	79.036	0.439	5.136	1.00	42.07
	ATOM	3807	CA	ALA	497	80.173	0.786	5.959	1.00	43.69
	ATOM	3808	CB	ALA	497	79.709	1.104	7.366	1.00	40.90
20	ATOM	3809	C	ALA	497	81.160	-0.372	5.962	1.00	46.16
	ATOM	3810	O	ALA	497	80.764	-1.525	5.814	1.00	46.90
	ATOM	3811	N	ILE	498	82.446	-0.059	6.090	1.00	48.78
	ATOM	3813	CA	ILE	498	83.494	-1.068	6.114	1.00	49.59
	ATOM	3814	CB	ILE	498	84.395	-0.993	4.858	1.00	49.46
	ATOM	3815	CG2	ILE	498	85.524	-2.006	4.954	1.00	51.16
	ATOM	3816	CG1	ILE	498	83.577	-1.244	3.591	1.00	48.96
	ATOM	3817	CD1	ILE	498	82.924	0.009	2.998	1.00	52.50
	ATOM	3818	C	ILE	498	84.352	-0.877	7.355	1.00	51.33
25	ATOM	3819	O	ILE	498	84.818	0.230	7.641	1.00	50.42
	ATOM	3820	N	GLY	499	84.506	-1.952	8.119	1.00	53.87
	ATOM	3822	CA	GLY	499	85.314	-1.909	9.324	1.00	58.16
	ATOM	3823	C	GLY	499	84.759	-1.094	10.483	1.00	62.44
	ATOM	3824	O	GLY	499	85.510	-0.400	11.175	1.00	65.17
	ATOM	3825	N	LEU	500	83.454	-1.187	10.720	1.00	62.92
	ATOM	3827	CA	LEU	500	82.839	-0.453	11.822	1.00	61.93
	ATOM	3828	CB	LEU	500	81.339	-0.752	11.888	1.00	58.77
	ATOM	3829	CG	LEU	500	80.501	-0.207	10.736	1.00	56.68
30	ATOM	3830	CD1	LEU	500	79.047	-0.547	10.964	1.00	55.05
	ATOM	3831	CD2	LEU	500	80.682	1.298	10.635	1.00	56.30
	ATOM	3832	C	LEU	500	83.501	-0.820	13.149	1.00	63.28
	ATOM	3833	O	LEU	500	83.623	-2.002	13.487	1.00	64.91
	ATOM	3834	N	PRO	505	87.387	-6.451	10.091	1.00	82.92
	ATOM	3835	CD	PRO	505	88.522	-6.966	10.874	1.00	83.74
	ATOM	3836	CA	PRO	505	87.618	-5.052	9.705	1.00	80.73
	ATOM	3837	CB	PRO	505	89.027	-4.770	10.247	1.00	81.95
	ATOM	3838	CG	PRO	505	89.655	-6.133	10.342	1.00	83.54
35	ATOM	3839	C	PRO	505	87.514	-4.794	8.205	1.00	77.60
	ATOM	3840	O	PRO	505	87.445	-3.651	7.761	1.00	77.24

	ATOM	3841	N	ASN	506	87.488	-5.863	7.424	1.00	75.24
	ATOM	3843	CA	ASN	506	87.380	-5.727	5.981	1.00	72.92
	ATOM	3844	CB	ASN	506	88.435	-6.589	5.283	1.00	73.87
	ATOM	3845	C	ASN	506	85.978	-6.122	5.529	1.00	70.43
	ATOM	3846	O	ASN	506	85.719	-6.281	4.340	1.00	70.01
5	ATOM	3847	N	ARG	507	85.075	-6.273	6.491	1.00	68.31
	ATOM	3849	CA	ARG	507	83.697	-6.647	6.200	1.00	65.59
	ATOM	3850	CB	ARG	507	83.112	-7.429	7.378	1.00	66.34
	ATOM	3851	C	ARG	507	82.846	-5.413	5.941	1.00	62.97
	ATOM	3852	O	ARG	507	83.191	-4.313	6.375	1.00	63.16
	ATOM	3853	N	VAL	508	81.740	-5.599	5.231	1.00	60.02
	ATOM	3855	CA	VAL	508	80.840	-4.495	4.947	1.00	58.59
	ATOM	3856	CB	VAL	508	80.532	-4.357	3.439	1.00	58.40
	ATOM	3857	CG1	VAL	508	81.813	-4.196	2.658	1.00	61.14
10	ATOM	3858	CG2	VAL	508	79.751	-5.553	2.938	1.00	61.01
	ATOM	3859	C	VAL	508	79.537	-4.682	5.707	1.00	57.24
	ATOM	3860	O	VAL	508	79.031	-5.803	5.836	1.00	58.42
	ATOM	3861	N	THR	509	79.020	-3.579	6.237	1.00	54.22
	ATOM	3863	CA	THR	509	77.769	-3.572	6.973	1.00	48.99
	ATOM	3864	CB	THR	509	77.971	-3.100	8.428	1.00	49.59
	ATOM	3865	OG1	THR	509	78.932	-3.935	9.082	1.00	51.71
	ATOM	3867	CG2	THR	509	76.665	-3.166	9.198	1.00	50.69
	ATOM	3868	C	THR	509	76.837	-2.606	6.253	1.00	46.51
15	ATOM	3869	O	THR	509	77.231	-1.503	5.886	1.00	44.91
	ATOM	3870	N	LYS	510	75.628	-3.059	5.966	1.00	45.65
	ATOM	3872	CA	LYS	510	74.658	-2.208	5.314	1.00	43.61
	ATOM	3873	CB	LYS	510	73.598	-3.058	4.632	1.00	45.46
	ATOM	3874	CG	LYS	510	72.845	-2.306	3.568	1.00	54.00
	ATOM	3875	CD	LYS	510	73.022	-2.912	2.183	1.00	58.74
	ATOM	3876	CE	LYS	510	72.194	-4.184	2.007	1.00	59.63
	ATOM	3877	NZ	LYS	510	72.711	-5.323	2.815	1.00	61.62
	ATOM	3881	C	LYS	510	74.065	-1.359	6.450	1.00	42.05
20	ATOM	3882	O	LYS	510	73.566	-1.898	7.439	1.00	41.29
	ATOM	3883	N	VAL	511	74.185	-0.038	6.333	1.00	40.14
	ATOM	3885	CA	VAL	511	73.719	0.894	7.359	1.00	35.38
	ATOM	3886	CB	VAL	511	74.932	1.554	8.074	1.00	33.16
	ATOM	3887	CG1	VAL	511	75.761	0.501	8.795	1.00	29.24
	ATOM	3888	CG2	VAL	511	75.804	2.295	7.054	1.00	30.37
	ATOM	3889	C	VAL	511	72.856	2.005	6.776	1.00	33.90
	ATOM	3890	O	VAL	511	72.722	2.110	5.558	1.00	32.53
	ATOM	3891	N	ALA	512	72.261	2.813	7.655	1.00	31.97
25	ATOM	3893	CA	ALA	512	71.434	3.956	7.248	1.00	31.10
	ATOM	3894	CB	ALA	512	70.088	3.945	7.952	1.00	27.38
	ATOM	3895	C	ALA	512	72.225	5.186	7.660	1.00	30.49
	ATOM	3896	O	ALA	512	72.775	5.235	8.766	1.00	30.10
	ATOM	3897	N	VAL	513	72.312	6.162	6.765	1.00	30.50
	ATOM	3899	CA	VAL	513	73.064	7.382	7.041	1.00	29.68
	ATOM	3900	CB	VAL	513	74.204	7.593	6.015	1.00	28.89
	ATOM	3901	CG1	VAL	513	74.966	8.856	6.334	1.00	26.30
	ATOM	3902	CG2	VAL	513	75.134	6.389	5.987	1.00	26.66
30	ATOM	3903	C	VAL	513	72.171	8.607	7.012	1.00	28.50
	ATOM	3904	O	VAL	513	71.536	8.893	5.994	1.00	26.27
	ATOM	3905	N	LYS	514	72.091	9.282	8.154	1.00	29.18
	ATOM	3907	CA	LYS	514	71.307	10.508	8.295	1.00	31.52
	ATOM	3908	CB	LYS	514	70.797	10.659	9.728	1.00	33.52
	ATOM	3909	CG	LYS	514	69.890	9.540	10.198	1.00	35.67
	ATOM	3910	CD	LYS	514	69.439	9.831	11.618	1.00	44.89
	ATOM	3911	CE	LYS	514	68.313	8.909	12.060	1.00	51.12
	ATOM	3912	NZ	LYS	514	67.029	9.137	11.307	1.00	57.11
35	ATOM	3916	C	LYS	514	72.233	11.681	7.956	1.00	30.75
	ATOM	3917	O	LYS	514	73.390	11.698	8.379	1.00	30.08

	ATOM	3918	N	MET	515	71.724	12.651	7.201	1.00	29.45
	ATOM	3920	CA	MET	515	72.511	13.814	6.786	1.00	28.74
	ATOM	3921	CB	MET	515	73.342	13.466	5.552	1.00	27.72
	ATOM	3922	CG	MET	515	72.487	13.034	4.378	1.00	31.56
	ATOM	3923	SD	MET	515	73.442	12.549	2.945	1.00	34.98
5	ATOM	3924	CE	MET	515	73.730	10.878	3.330	1.00	31.23
	ATOM	3925	C	MET	515	71.585	14.966	6.444	1.00	27.75
	ATOM	3926	O	MET	515	70.369	14.794	6.359	1.00	29.07
	ATOM	3927	N	LEU	516	72.152	16.145	6.247	1.00	28.33
	ATOM	3929	CA	LEU	516	71.348	17.313	5.912	1.00	31.16
	ATOM	3930	CB	LEU	516	72.052	18.605	6.339	1.00	28.70
	ATOM	3931	CG	LEU	516	72.312	18.866	7.826	1.00	28.33
	ATOM	3932	CD1	LEU	516	73.098	20.156	7.949	1.00	28.45
	ATOM	3933	CD2	LEU	516	71.020	18.959	8.604	1.00	21.64
10	ATOM	3934	C	LEU	516	71.069	17.378	4.421	1.00	33.22
	ATOM	3935	O	LEU	516	71.762	16.760	3.619	1.00	35.00
	ATOM	3936	N	LYS	517	70.022	18.100	4.061	1.00	34.69
	ATOM	3938	CA	LYS	517	69.696	18.286	2.665	1.00	34.20
	ATOM	3939	CB	LYS	517	68.194	18.475	2.496	1.00	37.45
	ATOM	3940	CG	LYS	517	67.403	17.264	2.950	1.00	43.71
	ATOM	3941	CD	LYS	517	66.157	17.072	2.126	1.00	51.25
	ATOM	3942	CE	LYS	517	65.123	18.135	2.419	1.00	58.56
	ATOM	3943	NZ	LYS	517	64.010	18.049	1.438	1.00	63.12
15	ATOM	3947	C	LYS	517	70.482	19.533	2.259	1.00	33.81
	ATOM	3948	O	LYS	517	70.991	20.244	3.130	1.00	33.17
	ATOM	3949	N	SER	518	70.603	19.788	0.959	1.00	33.42
	ATOM	3951	CA	SER	518	71.369	20.938	0.472	1.00	33.33
	ATOM	3952	CB	SER	518	71.550	20.842	-1.042	1.00	33.23
	ATOM	3953	OG	SER	518	70.306	20.624	-1.678	1.00	38.84
	ATOM	3955	C	SER	518	70.794	22.298	0.846	1.00	33.23
	ATOM	3956	O	SER	518	71.509	23.305	0.865	1.00	34.14
	ATOM	3957	N	ASP	519	69.510	22.313	1.178	1.00	32.77
20	ATOM	3959	CA	ASP	519	68.825	23.541	1.570	1.00	33.26
	ATOM	3960	CB	ASP	519	67.401	23.563	0.995	1.00	35.10
	ATOM	3961	CG	ASP	519	66.484	22.503	1.617	1.00	38.98
	ATOM	3962	OD1	ASP	519	66.958	21.430	2.042	1.00	37.30
	ATOM	3963	OD2	ASP	519	65.261	22.754	1.674	1.00	43.65
	ATOM	3964	C	ASP	519	68.793	23.747	3.091	1.00	33.05
	ATOM	3965	O	ASP	519	68.114	24.648	3.580	1.00	35.19
	ATOM	3966	N	ALA	520	69.538	22.931	3.833	1.00	31.38
	ATOM	3968	CA	ALA	520	69.570	23.032	5.293	1.00	29.47
25	ATOM	3969	CB	ALA	520	70.264	21.830	5.870	1.00	29.74
	ATOM	3970	C	ALA	520	70.229	24.301	5.812	1.00	29.83
	ATOM	3971	O	ALA	520	71.004	24.952	5.106	1.00	30.23
	ATOM	3972	N	THR	521	69.938	24.616	7.071	1.00	31.57
	ATOM	3974	CA	THR	521	70.487	25.793	7.742	1.00	34.56
	ATOM	3975	CB	THR	521	69.361	26.736	8.302	1.00	38.37
	ATOM	3976	OG1	THR	521	68.670	26.082	9.376	1.00	41.75
	ATOM	3978	CG2	THR	521	68.357	27.117	7.209	1.00	38.30
	ATOM	3979	C	THR	521	71.353	25.363	8.916	1.00	33.22
30	ATOM	3980	O	THR	521	71.320	24.207	9.327	1.00	32.31
	ATOM	3981	N	GLU	522	72.092	26.310	9.479	1.00	34.43
	ATOM	3983	CA	GLU	522	72.951	26.042	10.619	1.00	39.53
	ATOM	3984	CB	GLU	522	73.634	27.340	11.068	1.00	46.35
	ATOM	3985	CG	GLU	522	74.398	27.271	12.402	1.00	58.03
	ATOM	3986	CD	GLU	522	75.772	26.603	12.301	1.00	63.14
	ATOM	3987	OE1	GLU	522	76.800	27.321	12.404	1.00	61.75
	ATOM	3988	OE2	GLU	522	75.824	25.359	12.158	1.00	66.35
	ATOM	3989	C	GLU	522	72.130	25.428	11.765	1.00	38.40
35	ATOM	3990	O	GLU	522	72.642	24.622	12.543	1.00	37.92
	ATOM	3991	N	LYS	523	70.853	25.792	11.849	1.00	36.43

	ATOM	3993	CA	LYS	523	69.995	25.261	12.893	1.00	36.83
	ATOM	3994	CB	LYS	523	68.703	26.065	13.008	1.00	40.88
	ATOM	3995	CG	LYS	523	67.793	25.636	14.152	1.00	44.55
	ATOM	3996	CD	LYS	523	66.584	24.898	13.607	1.00	52.68
5	ATOM	3997	CE	LYS	523	65.629	24.483	14.708	1.00	56.04
	ATOM	3998	NZ	LYS	523	64.537	23.646	14.123	1.00	58.13
	ATOM	4002	C	LYS	523	69.689	23.804	12.601	1.00	35.27
	ATOM	4003	O	LYS	523	69.645	22.985	13.513	1.00	36.58
	ATOM	4004	N	ASP	524	69.496	23.473	11.326	1.00	32.27
	ATOM	4006	CA	ASP	524	69.235	22.089	10.963	1.00	27.18
	ATOM	4007	CB	ASP	524	68.952	21.953	9.480	1.00	26.32
	ATOM	4008	CG	ASP	524	67.635	22.555	9.089	1.00	25.22
	ATOM	4009	OD1	ASP	524	66.662	22.394	9.848	1.00	31.78
	ATOM	4010	OD2	ASP	524	67.568	23.190	8.028	1.00	24.00
10	ATOM	4011	C	ASP	524	70.445	21.268	11.342	1.00	26.83
	ATOM	4012	O	ASP	524	70.312	20.165	11.851	1.00	28.65
	ATOM	4013	N	LEU	525	71.633	21.827	11.129	1.00	28.69
	ATOM	4015	CA	LEU	525	72.872	21.148	11.473	1.00	26.96
	ATOM	4016	CB	LEU	525	74.077	21.981	11.049	1.00	22.80
	ATOM	4017	CG	LEU	525	75.445	21.355	11.341	1.00	22.32
	ATOM	4018	CD1	LEU	525	75.522	19.883	10.858	1.00	18.89
	ATOM	4019	CD2	LEU	525	76.504	22.212	10.704	1.00	17.44
	ATOM	4020	C	LEU	525	72.886	20.926	12.980	1.00	28.00
15	ATOM	4021	O	LEU	525	73.160	19.816	13.462	1.00	28.82
	ATOM	4022	N	SER	526	72.567	21.992	13.707	1.00	27.98
	ATOM	4024	CA	SER	526	72.496	21.994	15.168	1.00	30.78
	ATOM	4025	CB	SER	526	71.939	23.345	15.627	1.00	33.18
	ATOM	4026	OG	SER	526	71.624	23.347	17.009	1.00	42.73
	ATOM	4028	C	SER	526	71.599	20.865	15.704	1.00	30.56
	ATOM	4029	O	SER	526	71.906	20.206	16.716	1.00	31.92
	ATOM	4030	N	ASP	527	70.484	20.665	15.018	1.00	28.19
	ATOM	4032	CA	ASP	527	69.516	19.651	15.366	1.00	27.41
20	ATOM	4033	CB	ASP	527	68.207	19.932	14.632	1.00	27.63
	ATOM	4034	CG	ASP	527	67.492	21.172	15.149	1.00	27.37
	ATOM	4035	OD1	ASP	527	67.870	21.728	16.211	1.00	26.70
	ATOM	4036	OD2	ASP	527	66.525	21.579	14.487	1.00	33.80
	ATOM	4037	C	ASP	527	70.007	18.241	15.063	1.00	27.36
	ATOM	4038	O	ASP	527	69.722	17.309	15.816	1.00	30.13
	ATOM	4039	N	LEU	528	70.716	18.077	13.952	1.00	25.76
	ATOM	4041	CA	LEU	528	71.245	16.765	13.588	1.00	25.29
	ATOM	4042	CB	LEU	528	71.777	16.771	12.143	1.00	23.65
25	ATOM	4043	CG	LEU	528	72.283	15.432	11.574	1.00	25.86
	ATOM	4044	CD1	LEU	528	71.234	14.341	11.770	1.00	23.35
	ATOM	4045	CD2	LEU	528	72.652	15.566	10.102	1.00	17.46
	ATOM	4046	C	LEU	528	72.351	16.368	14.578	1.00	25.66
	ATOM	4047	O	LEU	528	72.418	15.210	15.015	1.00	24.02
	ATOM	4048	N	ILE	529	73.200	17.338	14.934	1.00	26.36
	ATOM	4050	CA	ILE	529	74.304	17.130	15.886	1.00	26.17
	ATOM	4051	CB	ILE	529	75.192	18.381	16.003	1.00	22.72
	ATOM	4052	CG2	ILE	529	76.250	18.180	17.057	1.00	21.32
30	ATOM	4053	CG1	ILE	529	75.876	18.666	14.685	1.00	20.71
	ATOM	4054	CD1	ILE	529	76.621	19.965	14.675	1.00	25.60
	ATOM	4055	C	ILE	529	73.756	16.835	17.283	1.00	29.87
	ATOM	4056	O	ILE	529	74.253	15.948	17.977	1.00	32.20
	ATOM	4057	N	SER	530	72.741	17.591	17.693	1.00	28.63
	ATOM	4059	CA	SER	530	72.143	17.381	18.991	1.00	32.21
	ATOM	4060	CB	SER	530	71.031	18.399	19.231	1.00	37.45
	ATOM	4061	OG	SER	530	70.065	18.342	18.195	1.00	49.52
	ATOM	4063	C	SER	530	71.598	15.956	19.075	1.00	30.96
35	ATOM	4064	O	SER	530	71.728	15.301	20.105	1.00	33.05
	ATOM	4065	N	GLU	531	70.996	15.476	17.996	1.00	29.13

	ATOM	4067	CA	GLU	531	70.468	14.117	17.987	1.00	29.84	
	ATOM	4068	CB	GLU	531	69.672	13.847	16.709	1.00	30.29	
	ATOM	4069	CG	GLU	531	69.093	12.445	16.666	1.00	27.39	
	ATOM	4070	CD	GLU	531	68.521	12.074	15.331	1.00	31.34	
5	ATOM	4071	OE1	GLU	531	67.929	10.981	15.228	1.00	35.90	
	ATOM	4072	OE2	GLU	531	68.660	12.860	14.376	1.00	38.37	
	ATOM	4073	C	GLU	531	71.600	13.081	18.109	1.00	28.48	
	ATOM	4074	O	GLU	531	71.468	12.094	18.822	1.00	28.17	
	ATOM	4075	N	MET	532	72.682	13.281	17.364	1.00	28.12	
	ATOM	4077	CA	MET	532	73.832	12.376	17.409	1.00	27.64	
	ATOM	4078	CB	MET	532	74.953	12.899	16.499	1.00	26.47	
	ATOM	4079	CG	MET	532	76.267	12.125	16.601	1.00	22.25	
	ATOM	4080	SD	MET	532	77.406	12.610	15.286	1.00	30.32	
10	ATOM	4081	CE	MET	532	77.613	14.366	15.661	1.00	20.92	
	ATOM	4082	C	MET	532	74.339	12.328	18.832	1.00	27.87	
	ATOM	4083	O	MET	532	74.640	11.267	19.364	1.00	30.31	
	ATOM	4084	N	GLU	533	74.439	13.497	19.442	1.00	27.08	
	ATOM	4086	CA	GLU	533	74.906	13.594	20.802	1.00	28.50	
	ATOM	4087	CB	GLU	533	75.071	15.064	21.177	1.00	29.09	
	ATOM	4088	CG	GLU	533	76.216	15.745	20.433	1.00	28.90	
	ATOM	4089	CD	GLU	533	77.564	15.070	20.661	1.00	31.08	
	ATOM	4090	OE1	GLU	533	78.001	14.969	21.823	1.00	34.15	
15	ATOM	4091	OE2	GLU	533	78.202	14.643	19.678	1.00	33.60	
	ATOM	4092	C	GLU	533	73.981	12.850	21.774	1.00	29.91	
	ATOM	4093	O	GLU	533	74.455	12.093	22.637	1.00	29.73	
	ATOM	4094	N	MET	534	72.670	13.014	21.588	1.00	29.70	
	ATOM	4096	CA	MET	534	71.692	12.346	22.444	1.00	27.97	
	ATOM	4097	CB	MET	534	70.258	12.751	22.082	1.00	28.95	
	ATOM	4098	CG	MET	534	69.311	12.594	23.278	0.50	29.62	PRT1
	ATOM	4099	SD	MET	534	67.538	12.682	22.961	0.50	29.87	PRT1
	ATOM	4100	CE	MET	534	67.269	14.452	22.795	0.50	31.07	PRT1
	ATOM	4101	C	MET	534	71.855	10.821	22.362	1.00	28.36	
20	ATOM	4102	O	MET	534	71.833	10.143	23.386	1.00	27.02	
	ATOM	4103	N	MET	535	72.048	10.297	21.151	1.00	26.96	
	ATOM	4105	CA	MET	535	72.239	8.861	20.947	1.00	26.63	
	ATOM	4106	CB	MET	535	72.347	8.521	19.456	1.00	24.67	
	ATOM	4107	CG	MET	535	71.089	8.778	18.659	1.00	23.15	
	ATOM	4108	SD	MET	535	71.160	8.062	17.011	1.00	24.57	
	ATOM	4109	CE	MET	535	71.251	9.486	16.023	1.00	24.79	
	ATOM	4110	C	MET	535	73.498	8.390	21.669	1.00	27.66	
	ATOM	4111	O	MET	535	73.564	7.259	22.164	1.00	28.83	
25	ATOM	4112	N	LYS	536	74.515	9.246	21.698	1.00	29.13	
	ATOM	4114	CA	LYS	536	75.757	8.918	22.392	1.00	30.50	
	ATOM	4115	CB	LYS	536	76.812	9.985	22.131	1.00	29.15	
	ATOM	4116	CG	LYS	536	77.499	9.883	20.802	1.00	27.71	
	ATOM	4117	CD	LYS	536	78.377	11.100	20.615	1.00	28.12	
	ATOM	4118	CE	LYS	536	79.085	11.096	19.279	1.00	26.89	
	ATOM	4119	NZ	LYS	536	79.688	12.436	19.077	1.00	27.54	
	ATOM	4123	C	LYS	536	75.480	8.836	23.892	1.00	31.92	
	ATOM	4124	O	LYS	536	75.921	7.908	24.559	1.00	31.19	
30	ATOM	4125	N	MET	537	74.742	9.814	24.409	1.00	34.02	
	ATOM	4127	CA	MET	537	74.384	9.881	25.822	1.00	36.35	
	ATOM	4128	CB	MET	537	73.648	11.197	26.083	1.00	43.33	
	ATOM	4129	CG	MET	537	73.096	11.376	27.507	1.00	54.60	
	ATOM	4130	SD	MET	537	71.426	10.674	27.856	1.00	67.38	
	ATOM	4131	CE	MET	537	71.684	9.813	29.440	1.00	62.03	
	ATOM	4132	C	MET	537	73.507	8.705	26.253	1.00	34.53	
	ATOM	4133	O	MET	537	73.744	8.069	27.275	1.00	36.76	
	ATOM	4134	N	ILE	538	72.496	8.425	25.454	1.00	32.24	
35	ATOM	4136	CA	ILE	538	71.568	7.367	25.757	1.00	29.88	
	ATOM	4137	CB	ILE	538	70.396	7.384	24.757	1.00	26.98	

	ATOM	4138	CG2	ILE	538	69.582	6.096	24.842	1.00	27.93
	ATOM	4139	CG1	ILE	538	69.527	8.614	25.036	1.00	22.58
	ATOM	4140	CD1	ILE	538	68.399	8.787	24.058	1.00	24.58
	ATOM	4141	C	ILE	538	72.236	6.006	25.804	1.00	31.83
5	ATOM	4142	O	ILE	538	71.983	5.227	26.713	1.00	36.32
	ATOM	4143	N	GLY	539	73.102	5.718	24.848	1.00	32.45
	ATOM	4145	CA	GLY	539	73.744	4.422	24.850	1.00	32.13
	ATOM	4146	C	GLY	539	72.974	3.380	24.056	1.00	33.83
	ATOM	4147	O	GLY	539	71.876	3.654	23.530	1.00	33.75
	ATOM	4148	N	LYS	540	73.539	2.173	24.010	1.00	33.36
	ATOM	4150	CA	LYS	540	72.980	1.054	23.256	1.00	37.04
	ATOM	4151	CB	LYS	540	74.110	0.181	22.709	1.00	39.21
	ATOM	4152	CG	LYS	540	74.865	0.893	21.623	1.00	48.72
10	ATOM	4153	CD	LYS	540	75.818	0.009	20.850	1.00	56.84
	ATOM	4154	CE	LYS	540	76.225	0.693	19.516	1.00	62.14
	ATOM	4155	NZ	LYS	540	77.252	-0.102	18.805	1.00	71.02
	ATOM	4159	C	LYS	540	71.938	0.162	23.901	1.00	36.51
	ATOM	4160	O	LYS	540	71.963	-0.096	25.113	1.00	38.52
	ATOM	4161	N	HIS	541	71.017	-0.295	23.058	1.00	32.98
	ATOM	4163	CA	HIS	541	69.963	-1.230	23.424	1.00	31.20
	ATOM	4164	CB	HIS	541	68.779	-0.561	24.095	1.00	30.35
	ATOM	4165	CG	HIS	541	67.815	-1.540	24.694	1.00	32.56
	ATOM	4166	CD2	HIS	541	67.737	-2.058	25.941	1.00	32.45
15	ATOM	4167	ND1	HIS	541	66.795	-2.124	23.974	1.00	29.22
	ATOM	4169	CE1	HIS	541	66.134	-2.965	24.753	1.00	31.56
	ATOM	4170	NE2	HIS	541	66.679	-2.932	25.957	1.00	32.22
	ATOM	4172	C	HIS	541	69.509	-1.937	22.152	1.00	32.00
	ATOM	4173	O	HIS	541	69.409	-1.324	21.095	1.00	32.84
	ATOM	4174	N	LYS	542	69.187	-3.222	22.273	1.00	33.61
	ATOM	4176	CA	LYS	542	68.786	-4.061	21.154	1.00	31.54
	ATOM	4177	CB	LYS	542	68.653	-5.516	21.596	1.00	33.94
	ATOM	4178	CG	LYS	542	68.322	-6.451	20.437	1.00	42.34
20	ATOM	4179	CD	LYS	542	68.083	-7.885	20.856	1.00	47.57
	ATOM	4180	CE	LYS	542	67.634	-8.726	19.658	1.00	52.70
	ATOM	4181	NZ	LYS	542	67.402	-10.146	20.023	1.00	59.51
	ATOM	4185	C	LYS	542	67.495	-3.611	20.487	1.00	29.57
	ATOM	4186	O	LYS	542	67.268	-3.884	19.305	1.00	27.99
	ATOM	4187	N	ASN	543	66.649	-2.931	21.253	1.00	28.32
	ATOM	4189	CA	ASN	543	65.378	-2.476	20.714	1.00	28.86
	ATOM	4190	CB	ASN	543	64.231	-2.947	21.601	1.00	29.33
	ATOM	4191	CG	ASN	543	64.247	-4.452	21.811	1.00	29.64
25	ATOM	4192	OD1	ASN	543	64.437	-4.926	22.930	1.00	33.86
	ATOM	4193	ND2	ASN	543	64.106	-5.206	20.732	1.00	28.02
	ATOM	4196	C	ASN	543	65.252	-0.983	20.378	1.00	29.69
	ATOM	4197	O	ASN	543	64.159	-0.413	20.457	1.00	30.02
	ATOM	4198	N	ILE	544	66.372	-0.357	20.011	1.00	27.35
	ATOM	4200	CA	ILE	544	66.382	1.046	19.593	1.00	25.95
	ATOM	4201	CB	ILE	544	66.898	2.030	20.706	1.00	25.56
	ATOM	4202	CG2	ILE	544	66.148	1.819	22.037	1.00	21.06
	ATOM	4203	CG1	ILE	544	68.406	1.901	20.902	1.00	25.61
30	ATOM	4204	CD1	ILE	544	68.952	2.818	21.976	1.00	25.89
	ATOM	4205	C	ILE	544	67.341	1.083	18.399	1.00	25.97
	ATOM	4206	O	ILE	544	68.126	0.152	18.227	1.00	25.69
	ATOM	4207	N	ILE	545	67.226	2.095	17.537	1.00	27.27
	ATOM	4209	CA	ILE	545	68.129	2.243	16.384	1.00	27.02
	ATOM	4210	CB	ILE	545	67.541	3.194	15.307	1.00	27.30
	ATOM	4211	CG2	ILE	545	68.592	3.553	14.269	1.00	26.52
	ATOM	4212	CG1	ILE	545	66.309	2.570	14.638	1.00	22.63
	ATOM	4213	CD1	ILE	545	66.605	1.447	13.665	1.00	17.57
35	ATOM	4214	C	ILE	545	69.383	2.873	16.979	1.00	28.55
	ATOM	4215	O	ILE	545	69.346	4.014	17.451	1.00	29.47

	ATOM	4216	N	ASN	546	70.482	2.123	16.965	1.00	30.90
	ATOM	4218	CA	ASN	546	71.748	2.564	17.560	1.00	29.56
	ATOM	4219	CB	ASN	546	72.497	1.365	18.159	1.00	26.32
	ATOM	4220	CG	ASN	546	71.732	0.695	19.281	1.00	23.81
	ATOM	4221	OD1	ASN	546	71.580	1.252	20.362	1.00	27.34
5	ATOM	4222	ND2	ASN	546	71.267	-0.515	19.039	1.00	23.49
	ATOM	4225	C	ASN	546	72.700	3.330	16.653	1.00	30.99
	ATOM	4226	O	ASN	546	72.679	3.169	15.430	1.00	30.98
	ATOM	4227	N	LEU	547	73.543	4.148	17.286	1.00	32.29
	ATOM	4229	CA	LEU	547	74.570	4.948	16.610	1.00	30.93
	ATOM	4230	CB	LEU	547	75.043	6.076	17.542	1.00	25.97
	ATOM	4231	CG	LEU	547	76.075	7.088	17.021	1.00	22.12
	ATOM	4232	CD1	LEU	547	75.553	7.815	15.765	1.00	22.10
	ATOM	4233	CD2	LEU	547	76.415	8.089	18.112	1.00	18.67
10	ATOM	4234	C	LEU	547	75.756	4.039	16.264	1.00	30.70
	ATOM	4235	O	LEU	547	76.284	3.361	17.137	1.00	34.46
	ATOM	4236	N	LEU	548	76.141	3.993	14.992	1.00	30.97
	ATOM	4238	CA	LEU	548	77.262	3.165	14.562	1.00	30.73
	ATOM	4239	CB	LEU	548	76.929	2.406	13.281	1.00	29.24
	ATOM	4240	CG	LEU	548	75.788	1.394	13.371	1.00	28.77
	ATOM	4241	CD1	LEU	548	75.924	0.460	12.209	1.00	26.55
	ATOM	4242	CD2	LEU	548	75.839	0.616	14.683	1.00	23.48
	ATOM	4243	C	LEU	548	78.522	3.982	14.347	1.00	33.00
15	ATOM	4244	O	LEU	548	79.640	3.500	14.558	1.00	35.92
	ATOM	4245	N	GLY	549	78.351	5.215	13.901	1.00	32.52
	ATOM	4247	CA	GLY	549	79.503	6.051	13.673	1.00	32.76
	ATOM	4248	C	GLY	549	79.092	7.411	13.180	1.00	33.72
	ATOM	4249	O	GLY	549	77.895	7.707	13.092	1.00	35.01
	ATOM	4250	N	ALA	550	80.089	8.226	12.840	1.00	33.47
	ATOM	4252	CA	ALA	550	79.848	9.566	12.337	1.00	30.69
	ATOM	4253	CB	ALA	550	79.555	10.509	13.497	1.00	28.66
	ATOM	4254	C	ALA	550	81.022	10.099	11.523	1.00	30.41
20	ATOM	4255	O	ALA	550	82.181	9.780	11.808	1.00	29.13
	ATOM	4256	N	CYS	551	80.695	10.817	10.446	1.00	30.29
	ATOM	4258	CA	CYS	551	81.675	11.490	9.584	1.00	28.44
	ATOM	4259	CB	CYS	551	81.432	11.214	8.096	1.00	27.25
	ATOM	4260	SG	CYS	551	81.639	9.508	7.566	1.00	28.89
	ATOM	4261	C	CYS	551	81.337	12.950	9.883	1.00	27.07
	ATOM	4262	O	CYS	551	80.293	13.441	9.467	1.00	29.86
	ATOM	4263	N	THR	552	82.184	13.616	10.658	1.00	25.10
	ATOM	4265	CA	THR	552	81.952	14.997	11.047	1.00	24.37
25	ATOM	4266	CB	THR	552	81.959	15.091	12.569	1.00	27.67
	ATOM	4267	OG1	THR	552	83.271	14.760	13.052	1.00	26.11
	ATOM	4269	CG2	THR	552	80.951	14.120	13.164	1.00	30.41
	ATOM	4270	C	THR	552	83.003	15.980	10.557	1.00	24.51
	ATOM	4271	O	THR	552	82.804	17.194	10.604	1.00	21.56
	ATOM	4272	N	GLN	553	84.151	15.441	10.162	1.00	27.13
	ATOM	4274	CA	GLN	553	85.284	16.243	9.710	1.00	26.64
	ATOM	4275	CB	GLN	553	86.592	15.679	10.283	1.00	25.24
	ATOM	4276	CG	GLN	553	86.641	15.561	11.809	1.00	22.38
30	ATOM	4277	CD	GLN	553	86.464	16.897	12.515	1.00	24.04
	ATOM	4278	OE1	GLN	553	87.267	17.815	12.344	1.00	31.50
	ATOM	4279	NE2	GLN	553	85.403	17.017	13.304	1.00	21.59
	ATOM	4282	C	GLN	553	85.384	16.276	8.206	1.00	28.02
	ATOM	4283	O	GLN	553	85.069	15.293	7.537	1.00	30.20
	ATOM	4284	N	ASP	554	85.794	17.430	7.695	1.00	28.08
	ATOM	4286	CA	ASP	554	86.000	17.652	6.263	1.00	30.14
	ATOM	4287	CB	ASP	554	87.330	17.034	5.833	1.00	29.82
	ATOM	4288	CG	ASP	554	88.451	17.470	6.707	1.00	31.79
35	ATOM	4289	OD1	ASP	554	88.699	18.666	6.767	1.00	36.45
	ATOM	4290	OD2	ASP	554	89.066	16.623	7.364	1.00	33.06

	ATOM	4291	C	ASP	554	84.895	17.217	5.317	1.00	29.52
	ATOM	4292	O	ASP	554	85.128	16.411	4.424	1.00	33.67
	ATOM	4293	N	GLY	555	83.709	17.793	5.488	1.00	29.02
	ATOM	4295	CA	GLY	555	82.586	17.476	4.621	1.00	26.05
5	ATOM	4296	C	GLY	555	81.286	17.447	5.405	1.00	23.80
	ATOM	4297	O	GLY	555	81.269	17.751	6.597	1.00	24.09
	ATOM	4298	N	PRO	556	80.175	17.117	4.740	1.00	23.29
	ATOM	4299	CD	PRO	556	80.094	16.804	3.304	1.00	18.93
	ATOM	4300	CA	PRO	556	78.860	17.045	5.378	1.00	23.45
	ATOM	4301	CB	PRO	556	77.943	16.643	4.226	1.00	22.35
	ATOM	4302	CG	PRO	556	78.889	15.931	3.261	1.00	24.94
	ATOM	4303	C	PRO	556	78.806	16.019	6.503	1.00	26.66
	ATOM	4304	O	PRO	556	79.488	14.984	6.464	1.00	27.76
	ATOM	4305	N	LEU	557	78.006	16.324	7.522	1.00	29.14
10	ATOM	4307	CA	LEU	557	77.842	15.440	8.676	1.00	30.83
	ATOM	4308	CB	LEU	557	77.173	16.181	9.842	1.00	28.40
	ATOM	4309	CG	LEU	557	76.775	15.393	11.097	1.00	22.93
	ATOM	4310	CD1	LEU	557	77.989	14.897	11.835	1.00	23.02
	ATOM	4311	CD2	LEU	557	75.970	16.285	11.984	1.00	23.53
	ATOM	4312	C	LEU	557	77.028	14.200	8.321	1.00	31.04
	ATOM	4313	O	LEU	557	75.968	14.293	7.694	1.00	31.89
	ATOM	4314	N	TYR	558	77.552	13.041	8.700	1.00	29.88
	ATOM	4316	CA	TYR	558	76.891	11.773	8.460	1.00	27.80
15	ATOM	4317	CB	TYR	558	77.741	10.878	7.562	1.00	28.04
	ATOM	4318	CG	TYR	558	77.895	11.339	6.122	1.00	29.98
	ATOM	4319	CD1	TYR	558	78.843	10.751	5.289	1.00	31.81
	ATOM	4320	CE1	TYR	558	78.980	11.140	3.956	1.00	32.22
	ATOM	4321	CD2	TYR	558	77.086	12.335	5.584	1.00	31.50
	ATOM	4322	CE2	TYR	558	77.214	12.729	4.256	1.00	31.57
	ATOM	4323	CZ	TYR	558	78.166	12.125	3.449	1.00	32.04
	ATOM	4324	OH	TYR	558	78.317	12.511	2.134	1.00	33.34
	ATOM	4326	C	TYR	558	76.715	11.099	9.809	1.00	27.34
20	ATOM	4327	O	TYR	558	77.678	10.937	10.558	1.00	25.80
	ATOM	4328	N	VAL	559	75.464	10.798	10.147	1.00	28.06
	ATOM	4330	CA	VAL	559	75.118	10.118	11.394	1.00	26.67
	ATOM	4331	CB	VAL	559	73.930	10.816	12.129	1.00	26.22
	ATOM	4332	CG1	VAL	559	73.590	10.079	13.425	1.00	22.58
	ATOM	4333	CG2	VAL	559	74.298	12.278	12.440	1.00	23.09
	ATOM	4334	C	VAL	559	74.745	8.715	10.943	1.00	24.32
	ATOM	4335	O	VAL	559	73.665	8.464	10.412	1.00	26.37
	ATOM	4336	N	ILE	560	75.689	7.815	11.095	1.00	23.63
25	ATOM	4338	CA	ILE	560	75.514	6.448	10.664	1.00	24.67
	ATOM	4339	CB	ILE	560	76.901	5.859	10.299	1.00	24.62
	ATOM	4340	CG2	ILE	560	76.753	4.507	9.646	1.00	30.13
	ATOM	4341	CG1	ILE	560	77.627	6.810	9.326	1.00	21.87
	ATOM	4342	CD1	ILE	560	79.114	6.538	9.162	1.00	22.25
	ATOM	4343	C	ILE	560	74.814	5.621	11.737	1.00	27.30
	ATOM	4344	O	ILE	560	75.306	5.505	12.865	1.00	28.80
	ATOM	4345	N	VAL	561	73.641	5.090	11.406	1.00	26.80
	ATOM	4347	CA	VAL	561	72.894	4.272	12.352	1.00	26.16
30	ATOM	4348	CB	VAL	561	71.572	4.953	12.810	1.00	24.10
	ATOM	4349	CG1	VAL	561	71.866	6.208	13.599	1.00	24.11
	ATOM	4350	CG2	VAL	561	70.676	5.254	11.625	1.00	21.97
	ATOM	4351	C	VAL	561	72.572	2.901	11.761	1.00	27.98
	ATOM	4352	O	VAL	561	72.853	2.632	10.584	1.00	26.49
	ATOM	4353	N	GLU	562	71.998	2.039	12.599	1.00	28.86
	ATOM	4355	CA	GLU	562	71.605	0.685	12.219	1.00	28.23
	ATOM	4356	CB	GLU	562	71.090	-0.068	13.440	1.00	25.86
	ATOM	4357	CG	GLU	562	72.170	-0.392	14.424	1.00	27.04
35	ATOM	4358	CD	GLU	562	71.641	-0.969	15.714	1.00	28.37
	ATOM	4359	OE1	GLU	562	72.389	-1.714	16.372	1.00	33.36

	ATOM	4360	OE2	GLU	562	70.491	-0.665	16.092	1.00	31.60
	ATOM	4361	C	GLU	562	70.529	0.720	11.171	1.00	29.67
	ATOM	4362	O	GLU	562	69.581	1.489	11.287	1.00	32.53
	ATOM	4363	N	TYR	563	70.666	-0.126	10.162	1.00	30.70
5	ATOM	4365	CA	TYR	563	69.699	-0.209	9.083	1.00	30.65
	ATOM	4366	CB	TYR	563	70.419	-0.621	7.801	1.00	30.83
	ATOM	4367	CG	TYR	563	69.510	-0.905	6.633	1.00	32.10
	ATOM	4368	CD1	TYR	563	68.545	0.018	6.236	1.00	33.24
	ATOM	4369	CE1	TYR	563	67.715	-0.227	5.160	1.00	34.65
	ATOM	4370	CD2	TYR	563	69.609	-2.098	5.922	1.00	31.04
	ATOM	4371	CE2	TYR	563	68.779	-2.353	4.838	1.00	33.12
	ATOM	4372	CZ	TYR	563	67.831	-1.413	4.470	1.00	34.22
	ATOM	4373	OH	TYR	563	67.002	-1.650	3.400	1.00	34.76
10	ATOM	4375	C	TYR	563	68.592	-1.223	9.406	1.00	34.39
	ATOM	4376	O	TYR	563	68.855	-2.325	9.884	1.00	34.87
	ATOM	4377	N	ALA	564	67.356	-0.861	9.091	1.00	35.49
	ATOM	4379	CA	ALA	564	66.212	-1.726	9.324	1.00	35.41
	ATOM	4380	CB	ALA	564	65.213	-1.000	10.210	1.00	35.93
	ATOM	4381	C	ALA	564	65.585	-2.056	7.962	1.00	37.19
	ATOM	4382	O	ALA	564	64.789	-1.276	7.434	1.00	38.08
	ATOM	4383	N	SER	565	65.931	-3.211	7.401	1.00	37.14
	ATOM	4385	CA	SER	565	65.433	-3.616	6.080	1.00	36.83
	ATOM	4386	CB	SER	565	66.151	-4.881	5.614	1.00	35.24
15	ATOM	4387	OG	SER	565	66.105	-5.873	6.619	1.00	34.96
	ATOM	4389	C	SER	565	63.932	-3.782	5.886	1.00	38.65
	ATOM	4390	O	SER	565	63.428	-3.617	4.760	1.00	37.80
	ATOM	4391	N	LYS	566	63.212	-4.077	6.964	1.00	38.96
	ATOM	4393	CA	LYS	566	61.772	-4.271	6.851	1.00	37.83
	ATOM	4394	CB	LYS	566	61.357	-5.495	7.655	1.00	39.07
	ATOM	4395	CG	LYS	566	61.954	-6.765	7.078	1.00	43.73
	ATOM	4396	CD	LYS	566	61.813	-7.950	7.996	1.00	47.07
	ATOM	4397	CE	LYS	566	62.258	-9.216	7.299	1.00	47.77
20	ATOM	4398	NZ	LYS	566	62.361	-10.326	8.278	1.00	51.48
	ATOM	4402	C	LYS	566	60.899	-3.050	7.165	1.00	37.53
	ATOM	4403	O	LYS	566	59.702	-3.180	7.442	1.00	38.55
	ATOM	4404	N	GLY	567	61.496	-1.866	7.066	1.00	35.23
	ATOM	4406	CA	GLY	567	60.788	-0.627	7.305	1.00	33.64
	ATOM	4407	C	GLY	567	60.120	-0.485	8.656	1.00	33.24
	ATOM	4408	O	GLY	567	60.518	-1.133	9.627	1.00	33.80
	ATOM	4409	N	ASN	568	59.120	0.389	8.716	1.00	31.65
	ATOM	4411	CA	ASN	568	58.407	0.623	9.952	1.00	33.38
25	ATOM	4412	CB	ASN	568	57.831	2.055	10.025	1.00	37.10
	ATOM	4413	CG	ASN	568	56.624	2.272	9.116	1.00	37.78
	ATOM	4414	OD1	ASN	568	55.552	1.708	9.337	1.00	41.15
	ATOM	4415	ND2	ASN	568	56.780	3.147	8.124	1.00	35.74
	ATOM	4418	C	ASN	568	57.357	-0.435	10.263	1.00	33.33
	ATOM	4419	O	ASN	568	56.917	-1.178	9.384	1.00	32.54
	ATOM	4420	N	LEU	569	56.971	-0.490	11.532	1.00	33.35
	ATOM	4422	CA	LEU	569	56.004	-1.455	12.040	1.00	32.38
	ATOM	4423	CB	LEU	569	55.838	-1.263	13.552	1.00	27.50
30	ATOM	4424	CG	LEU	569	54.954	-2.259	14.291	1.00	26.34
	ATOM	4425	CD1	LEU	569	55.452	-3.671	14.007	1.00	24.19
	ATOM	4426	CD2	LEU	569	54.968	-1.951	15.787	1.00	21.44
	ATOM	4427	C	LEU	569	54.641	-1.433	11.355	1.00	33.35
	ATOM	4428	O	LEU	569	54.060	-2.484	11.095	1.00	34.99
	ATOM	4429	N	ARG	570	54.130	-0.239	11.083	1.00	34.36
	ATOM	4431	CA	ARG	570	52.827	-0.091	10.445	1.00	36.82
	ATOM	4432	CB	ARG	570	52.548	1.393	10.188	1.00	37.28
	ATOM	4433	CG	ARG	570	51.210	1.689	9.539	1.00	43.90
35	ATOM	4434	CD	ARG	570	51.212	3.099	8.967	1.00	50.39
	ATOM	4435	NE	ARG	570	52.273	3.268	7.973	1.00	54.99

	ATOM	4437	CZ	ARG	570	53.075	4.328	7.887	1.00	54.96
	ATOM	4438	NH1	ARG	570	52.947	5.343	8.735	1.00	54.71
	ATOM	4441	NH2	ARG	570	54.030	4.357	6.966	1.00	56.12
	ATOM	4444	C	ARG	570	52.818	-0.877	9.133	1.00	36.53
5	ATOM	4445	O	ARG	570	51.968	-1.737	8.909	1.00	34.68
	ATOM	4446	N	GLU	571	53.830	-0.611	8.320	1.00	37.14
	ATOM	4448	CA	GLU	571	53.994	-1.253	7.031	1.00	37.94
	ATOM	4449	CB	GLU	571	55.126	-0.558	6.274	1.00	39.71
	ATOM	4450	CG	GLU	571	54.834	0.916	6.062	1.00	44.69
	ATOM	4451	CD	GLU	571	55.934	1.665	5.346	1.00	52.22
	ATOM	4452	OE1	GLU	571	57.098	1.196	5.358	1.00	54.87
	ATOM	4453	OE2	GLU	571	55.629	2.743	4.777	1.00	56.37
	ATOM	4454	C	GLU	571	54.258	-2.744	7.164	1.00	36.53
	ATOM	4455	O	GLU	571	53.692	-3.550	6.426	1.00	36.35
10	ATOM	4456	N	TYR	572	55.105	-3.105	8.120	1.00	35.77
	ATOM	4458	CA	TYR	572	55.456	-4.499	8.371	1.00	36.28
	ATOM	4459	CB	TYR	572	56.446	-4.555	9.534	1.00	30.27
	ATOM	4460	CG	TYR	572	56.859	-5.925	10.006	1.00	31.65
	ATOM	4461	CD1	TYR	572	57.889	-6.626	9.371	1.00	29.40
	ATOM	4462	CE1	TYR	572	58.354	-7.839	9.883	1.00	29.32
	ATOM	4463	CD2	TYR	572	56.292	-6.480	11.161	1.00	35.17
	ATOM	4464	CE2	TYR	572	56.749	-7.696	11.680	1.00	33.08
	ATOM	4465	CZ	TYR	572	57.780	-8.366	11.038	1.00	35.15
15	ATOM	4466	OH	TYR	572	58.234	-9.559	11.558	1.00	36.91
	ATOM	4468	C	TYR	572	54.189	-5.321	8.672	1.00	37.70
	ATOM	4469	O	TYR	572	53.942	-6.369	8.068	1.00	36.82
	ATOM	4470	N	LEU	573	53.368	-4.799	9.576	1.00	37.64
	ATOM	4472	CA	LEU	573	52.126	-5.442	9.970	1.00	36.03
	ATOM	4473	CB	LEU	573	51.497	-4.659	11.122	1.00	36.17
	ATOM	4474	CG	LEU	573	52.257	-4.641	12.445	1.00	36.39
	ATOM	4475	CD1	LEU	573	51.590	-3.665	13.412	1.00	36.17
	ATOM	4476	CD2	LEU	573	52.311	-6.042	13.032	1.00	32.13
20	ATOM	4477	C	LEU	573	51.117	-5.562	8.822	1.00	36.33
	ATOM	4478	O	LEU	573	50.477	-6.596	8.649	1.00	35.19
	ATOM	4479	N	GLN	574	50.975	-4.502	8.038	1.00	37.66
	ATOM	4481	CA	GLN	574	50.024	-4.514	6.936	1.00	41.78
	ATOM	4482	CB	GLN	574	49.798	-3.103	6.413	1.00	43.82
	ATOM	4483	CG	GLN	574	48.898	-2.273	7.264	1.00	45.42
	ATOM	4484	CD	GLN	574	48.871	-0.850	6.801	1.00	49.56
	ATOM	4485	OE1	GLN	574	49.456	-0.506	5.772	1.00	52.22
	ATOM	4486	NE2	GLN	574	48.207	0.001	7.565	1.00	54.86
25	ATOM	4489	C	GLN	574	50.401	-5.427	5.783	1.00	42.89
	ATOM	4490	O	GLN	574	49.532	-5.898	5.042	1.00	46.15
	ATOM	4491	N	ALA	575	51.695	-5.646	5.599	1.00	42.39
	ATOM	4493	CA	ALA	575	52.165	-6.516	4.532	1.00	40.19
	ATOM	4494	CB	ALA	575	53.597	-6.165	4.170	1.00	40.68
	ATOM	4495	C	ALA	575	52.088	-7.970	4.971	1.00	40.49
	ATOM	4496	O	ALA	575	52.437	-8.867	4.210	1.00	43.34
	ATOM	4497	N	ARG	576	51.630	-8.197	6.202	1.00	38.76
	ATOM	4499	CA	ARG	576	51.538	-9.542	6.761	1.00	38.44
30	ATOM	4500	CB	ARG	576	52.600	-9.708	7.846	1.00	34.26
	ATOM	4501	CG	ARG	576	53.991	-9.609	7.284	1.00	37.16
	ATOM	4502	CD	ARG	576	55.052	-9.625	8.356	1.00	36.38
	ATOM	4503	NE	ARG	576	56.384	-9.663	7.760	1.00	36.98
	ATOM	4505	CZ	ARG	576	56.897	-8.714	6.983	1.00	38.62
	ATOM	4506	NH1	ARG	576	56.204	-7.618	6.689	1.00	41.41
	ATOM	4509	NH2	ARG	576	58.112	-8.863	6.491	1.00	37.48
	ATOM	4512	C	ARG	576	50.165	-9.860	7.321	1.00	40.55
	ATOM	4513	O	ARG	576	50.013	-10.746	8.169	1.00	43.20
35	ATOM	4514	N	ARG	577	49.156	-9.146	6.844	1.00	41.98
	ATOM	4516	CA	ARG	577	47.794	-9.372	7.309	1.00	43.12

	ATOM	4517	CB	ARG	577	46.896	-8.226	6.851	1.00	44.21
	ATOM	4518	CG	ARG	577	47.206	-6.910	7.525	1.00	45.21
	ATOM	4519	CD	ARG	577	46.402	-5.766	6.941	1.00	47.50
	ATOM	4520	NE	ARG	577	46.172	-4.734	7.948	1.00	47.58
	ATOM	4522	CZ	ARG	577	45.447	-3.641	7.752	1.00	47.63
5	ATOM	4523	NH1	ARG	577	44.882	-3.421	6.574	1.00	49.05
	ATOM	4526	NH2	ARG	577	45.256	-2.789	8.747	1.00	49.88
	ATOM	4529	C	ARG	577	47.241	-10.715	6.821	1.00	43.10
	ATOM	4530	O	ARG	577	47.297	-11.015	5.627	1.00	43.86
	ATOM	4531	N	GLN	594	53.448	-13.666	7.976	1.00	64.97
	ATOM	4533	CA	GLN	594	52.231	-13.872	8.759	1.00	66.30
	ATOM	4534	CB	GLN	594	51.419	-15.042	8.200	1.00	67.44
	ATOM	4535	C	GLN	594	52.582	-14.116	10.224	1.00	66.02
	ATOM	4536	O	GLN	594	53.162	-15.145	10.583	1.00	67.47
10	ATOM	4537	N	LEU	595	52.218	-13.151	11.058	1.00	62.86
	ATOM	4539	CA	LEU	595	52.499	-13.187	12.480	1.00	59.77
	ATOM	4540	CB	LEU	595	52.597	-11.751	12.987	1.00	59.35
	ATOM	4541	CG	LEU	595	53.471	-10.905	12.051	1.00	61.70
	ATOM	4542	CD1	LEU	595	53.307	-9.427	12.322	1.00	64.61
	ATOM	4543	CD2	LEU	595	54.923	-11.324	12.175	1.00	62.38
	ATOM	4544	C	LEU	595	51.482	-13.985	13.290	1.00	57.49
	ATOM	4545	O	LEU	595	50.302	-14.026	12.951	1.00	56.36
	ATOM	4546	N	SER	596	51.969	-14.647	14.338	1.00	55.62
15	ATOM	4548	CA	SER	596	51.134	-15.447	15.222	1.00	54.72
	ATOM	4549	CB	SER	596	51.905	-16.669	15.721	1.00	55.13
	ATOM	4550	OG	SER	596	52.871	-16.309	16.698	1.00	54.98
	ATOM	4552	C	SER	596	50.723	-14.597	16.415	1.00	54.73
	ATOM	4553	O	SER	596	51.348	-13.579	16.704	1.00	53.29
	ATOM	4554	N	SER	597	49.704	-15.051	17.137	1.00	55.09
	ATOM	4556	CA	SER	597	49.215	-14.337	18.307	1.00	56.44
	ATOM	4557	CB	SER	597	48.178	-15.185	19.044	1.00	59.14
	ATOM	4558	OG	SER	597	47.455	-16.009	18.138	1.00	65.57
20	ATOM	4560	C	SER	597	50.387	-14.026	19.238	1.00	55.64
	ATOM	4561	O	SER	597	50.430	-12.966	19.856	1.00	56.04
	ATOM	4562	N	LYS	598	51.345	-14.948	19.315	1.00	54.91
	ATOM	4564	CA	LYS	598	52.528	-14.773	20.161	1.00	54.25
	ATOM	4565	CB	LYS	598	53.287	-16.096	20.311	1.00	54.23
	ATOM	4566	CG	LYS	598	54.236	-16.138	21.494	1.00	55.12
	ATOM	4567	CD	LYS	598	55.009	-17.448	21.523	1.00	59.41
	ATOM	4568	CE	LYS	598	55.711	-17.679	22.858	1.00	58.10
	ATOM	4569	NZ	LYS	598	54.750	-17.983	23.959	1.00	56.10
25	ATOM	4573	C	LYS	598	53.439	-13.716	19.536	1.00	52.32
	ATOM	4574	O	LYS	598	53.986	-12.869	20.249	1.00	52.23
	ATOM	4575	N	ASP	599	53.573	-13.768	18.208	1.00	47.57
	ATOM	4577	CA	ASP	599	54.389	-12.818	17.466	1.00	45.47
	ATOM	4578	CB	ASP	599	54.324	-13.101	15.959	1.00	49.05
	ATOM	4579	CG	ASP	599	55.245	-14.238	15.525	1.00	54.16
	ATOM	4580	OD1	ASP	599	56.242	-14.503	16.223	1.00	61.34
	ATOM	4581	OD2	ASP	599	54.992	-14.863	14.471	1.00	55.80
	ATOM	4582	C	ASP	599	53.933	-11.383	17.721	1.00	43.55
30	ATOM	4583	O	ASP	599	54.762	-10.491	17.895	1.00	44.34
	ATOM	4584	N	LEU	600	52.622	-11.160	17.751	1.00	39.73
	ATOM	4586	CA	LEU	600	52.104	-9.821	17.989	1.00	37.64
	ATOM	4587	CB	LEU	600	50.597	-9.743	17.719	1.00	35.42
	ATOM	4588	CG	LEU	600	50.075	-9.951	16.287	1.00	33.95
	ATOM	4589	CD1	LEU	600	48.621	-9.552	16.262	1.00	36.59
	ATOM	4590	CD2	LEU	600	50.841	-9.139	15.265	1.00	28.40
	ATOM	4591	C	LEU	600	52.429	-9.347	19.402	1.00	38.24
	ATOM	4592	O	LEU	600	52.817	-8.193	19.590	1.00	38.28
35	ATOM	4593	N	VAL	601	52.305	-10.235	20.391	1.00	38.77
	ATOM	4595	CA	VAL	601	52.610	-9.855	21.772	1.00	38.87

	ATOM	4596	CB	VAL	601	52.121	-10.906	22.812	1.00	38.03	
	ATOM	4597	CG1	VAL	601	52.150	-10.303	24.223	1.00	36.21	
	ATOM	4598	CG2	VAL	601	50.710	-11.332	22.504	1.00	39.07	
	ATOM	4599	C	VAL	601	54.123	-9.662	21.887	1.00	38.98	
5	ATOM	4600	O	VAL	601	54.601	-8.757	22.580	1.00	39.93	
	ATOM	4601	N	SER	602	54.861	-10.488	21.155	1.00	37.35	
	ATOM	4603	CA	SER	602	56.311	-10.422	21.126	1.00	37.11	
	ATOM	4604	CB	SER	602	56.853	-11.469	20.154	1.00	39.38	
	ATOM	4605	OG	SER	602	58.265	-11.413	20.061	1.00	46.76	
	ATOM	4607	C	SER	602	56.695	-9.020	20.664	1.00	35.43	
	ATOM	4608	O	SER	602	57.493	-8.339	21.315	1.00	35.01	
	ATOM	4609	N	CYS	603	56.091	-8.586	19.561	1.00	33.42	
	ATOM	4611	CA	CYS	603	56.329	-7.254	19.015	1.00	32.18	
10	ATOM	4612	CB	CYS	603	55.449	-7.035	17.790	1.00	32.38	
	ATOM	4613	SG	CYS	603	55.440	-5.365	17.123	0.50	35.11	PRT1
	ATOM	4614	C	CYS	603	56.074	-6.167	20.059	1.00	31.20	
	ATOM	4615	O	CYS	603	56.862	-5.234	20.185	1.00	32.44	
	ATOM	4616	N	ALA	604	55.001	-6.321	20.828	1.00	29.74	
	ATOM	4618	CA	ALA	604	54.640	-5.363	21.872	1.00	32.26	
	ATOM	4619	CB	ALA	604	53.232	-5.675	22.412	1.00	31.75	
	ATOM	4620	C	ALA	604	55.656	-5.365	23.019	1.00	33.71	
	ATOM	4621	O	ALA	604	55.933	-4.326	23.621	1.00	33.49	
15	ATOM	4622	N	TYR	605	56.186	-6.544	23.326	1.00	35.56	
	ATOM	4624	CA	TYR	605	57.176	-6.709	24.388	1.00	35.49	
	ATOM	4625	CB	TYR	605	57.447	-8.206	24.617	1.00	36.12	
	ATOM	4626	CG	TYR	605	58.562	-8.495	25.591	1.00	34.75	
	ATOM	4627	CD1	TYR	605	58.415	-8.237	26.954	1.00	34.30	
	ATOM	4628	CE1	TYR	605	59.444	-8.499	27.853	1.00	36.26	
	ATOM	4629	CD2	TYR	605	59.773	-9.021	25.150	1.00	37.39	
	ATOM	4630	CE2	TYR	605	60.812	-9.288	26.040	1.00	37.81	
	ATOM	4631	CZ	TYR	605	60.641	-9.027	27.388	1.00	38.34	
20	ATOM	4632	OH	TYR	605	61.662	-9.324	28.265	1.00	42.09	
	ATOM	4634	C	TYR	605	58.475	-5.972	24.027	1.00	34.98	
	ATOM	4635	O	TYR	605	58.981	-5.171	24.822	1.00	35.83	
	ATOM	4636	N	GLN	606	58.996	-6.247	22.828	1.00	33.99	
	ATOM	4638	CA	GLN	606	60.218	-5.620	22.315	1.00	33.60	
	ATOM	4639	CB	GLN	606	60.506	-6.111	20.894	1.00	31.37	
	ATOM	4640	CG	GLN	606	60.858	-7.584	20.786	1.00	32.05	
	ATOM	4641	CD	GLN	606	61.175	-8.015	19.354	1.00	30.33	
	ATOM	4642	OE1	GLN	606	62.145	-7.558	18.754	1.00	30.84	
25	ATOM	4643	NE2	GLN	606	60.353	-8.895	18.810	1.00	33.75	
	ATOM	4646	C	GLN	606	60.123	-4.079	22.321	1.00	34.86	
	ATOM	4647	O	GLN	606	61.070	-3.390	22.702	1.00	37.54	
	ATOM	4648	N	VAL	607	58.975	-3.555	21.904	1.00	32.89	
	ATOM	4650	CA	VAL	607	58.748	-2.114	21.883	1.00	30.80	
	ATOM	4651	CB	VAL	607	57.426	-1.777	21.120	1.00	28.82	
	ATOM	4652	CG1	VAL	607	57.121	-0.299	21.191	1.00	25.36	
	ATOM	4653	CG2	VAL	607	57.541	-2.204	19.661	1.00	23.37	
	ATOM	4654	C	VAL	607	58.747	-1.532	23.312	1.00	30.48	
	ATOM	4655	O	VAL	607	59.359	-0.486	23.563	1.00	29.42	
30	ATOM	4656	N	ALA	608	58.106	-2.225	24.255	1.00	30.07	
	ATOM	4658	CA	ALA	608	58.064	-1.761	25.646	1.00	30.14	
	ATOM	4659	CB	ALA	608	57.027	-2.548	26.452	1.00	28.49	
	ATOM	4660	C	ALA	608	59.455	-1.849	26.305	1.00	31.25	
	ATOM	4661	O	ALA	608	59.791	-1.054	27.198	1.00	28.90	
	ATOM	4662	N	ARG	609	60.257	-2.819	25.870	1.00	31.61	
	ATOM	4664	CA	ARG	609	61.608	-2.979	26.393	1.00	31.99	
	ATOM	4665	CB	ARG	609	62.253	-4.245	25.856	1.00	34.93	
	ATOM	4666	CG	ARG	609	61.606	-5.507	26.317	1.00	40.82	
35	ATOM	4667	CD	ARG	609	62.633	-6.606	26.397	1.00	42.68	
	ATOM	4668	NE	ARG	609	63.275	-6.621	27.705	1.00	43.85	

	ATOM	4670	CZ	ARG	609	64.332	-7.364	28.019	1.00	44.73
	ATOM	4671	NH1	ARG	609	64.889	-8.162	27.108	1.00	41.40
	ATOM	4674	NH2	ARG	609	64.803	-7.341	29.260	1.00	44.85
	ATOM	4677	C	ARG	609	62.459	-1.796	25.966	1.00	33.70
5	ATOM	4678	O	ARG	609	63.130	-1.174	26.793	1.00	35.94
	ATOM	4679	N	GLY	610	62.459	-1.511	24.663	1.00	31.22
	ATOM	4681	CA	GLY	610	63.232	-0.391	24.157	1.00	27.21
	ATOM	4682	C	GLY	610	62.819	0.875	24.865	1.00	25.81
	ATOM	4683	O	GLY	610	63.665	1.652	25.300	1.00	26.21
	ATOM	4684	N	MET	611	61.511	1.056	25.015	1.00	27.12
	ATOM	4686	CA	MET	611	60.969	2.222	25.695	1.00	28.82
	ATOM	4687	CB	MET	611	59.457	2.288	25.524	1.00	29.29
	ATOM	4688	CG	MET	611	59.004	2.706	24.135	1.00	31.07
	ATOM	4689	SD	MET	611	59.732	4.286	23.617	1.00	28.38
10	ATOM	4690	CE	MET	611	59.155	5.431	24.922	1.00	28.34
	ATOM	4691	C	MET	611	61.341	2.261	27.178	1.00	30.34
	ATOM	4692	O	MET	611	61.596	3.334	27.730	1.00	31.73
	ATOM	4693	N	GLU	612	61.347	1.109	27.837	1.00	32.72
	ATOM	4695	CA	GLU	612	61.723	1.057	29.253	1.00	35.46
	ATOM	4696	CB	GLU	612	61.603	-0.370	29.792	1.00	34.70
	ATOM	4697	CG	GLU	612	62.029	-0.516	31.237	1.00	32.31
	ATOM	4698	CD	GLU	612	62.135	-1.968	31.688	1.00	33.14
	ATOM	4699	OE1	GLU	612	62.546	-2.834	30.883	1.00	30.79
15	ATOM	4700	OE2	GLU	612	61.826	-2.240	32.867	1.00	36.13
	ATOM	4701	C	GLU	612	63.178	1.544	29.353	1.00	36.43
	ATOM	4702	O	GLU	612	63.534	2.319	30.261	1.00	35.38
	ATOM	4703	N	TYR	613	63.999	1.107	28.391	1.00	35.47
	ATOM	4705	CA	TYR	613	65.403	1.507	28.334	1.00	33.16
	ATOM	4706	CB	TYR	613	66.156	0.743	27.241	1.00	31.33
	ATOM	4707	CG	TYR	613	67.612	1.146	27.132	1.00	33.03
	ATOM	4708	CD1	TYR	613	68.584	0.544	27.931	1.00	36.69
	ATOM	4709	CE1	TYR	613	69.930	0.927	27.851	1.00	36.82
20	ATOM	4710	CD2	TYR	613	68.021	2.148	26.247	1.00	33.49
	ATOM	4711	CE2	TYR	613	69.352	2.540	26.157	1.00	34.73
	ATOM	4712	CZ	TYR	613	70.307	1.927	26.963	1.00	37.07
	ATOM	4713	OH	TYR	613	71.632	2.318	26.896	1.00	36.77
	ATOM	4715	C	TYR	613	65.539	3.005	28.088	1.00	31.82
	ATOM	4716	O	TYR	613	66.256	3.682	28.814	1.00	34.76
	ATOM	4717	N	LEU	614	64.836	3.536	27.090	1.00	28.44
	ATOM	4719	CA	LEU	614	64.931	4.956	26.793	1.00	25.67
	ATOM	4720	CB	LEU	614	64.089	5.319	25.569	1.00	24.75
25	ATOM	4721	CG	LEU	614	64.545	4.778	24.208	1.00	23.73
	ATOM	4722	CD1	LEU	614	63.594	5.257	23.125	1.00	20.54
	ATOM	4723	CD2	LEU	614	65.983	5.213	23.894	1.00	23.21
	ATOM	4724	C	LEU	614	64.499	5.761	28.001	1.00	28.30
	ATOM	4725	O	LEU	614	65.110	6.770	28.345	1.00	27.09
	ATOM	4726	N	ALA	615	63.470	5.272	28.683	1.00	32.73
	ATOM	4728	CA	ALA	615	62.955	5.945	29.871	1.00	34.10
	ATOM	4729	CB	ALA	615	61.625	5.314	30.314	1.00	33.68
	ATOM	4730	C	ALA	615	63.986	5.913	31.007	1.00	33.84
30	ATOM	4731	O	ALA	615	64.112	6.885	31.753	1.00	34.95
	ATOM	4732	N	SER	616	64.722	4.809	31.134	1.00	32.69
	ATOM	4734	CA	SER	616	65.738	4.703	32.175	1.00	33.50
	ATOM	4735	CB	SER	616	66.287	3.277	32.285	1.00	28.27
	ATOM	4736	OG	SER	616	67.076	2.935	31.165	1.00	25.54
	ATOM	4738	C	SER	616	66.870	5.678	31.865	1.00	35.43
	ATOM	4739	O	SER	616	67.637	6.061	32.755	1.00	37.32
	ATOM	4740	N	LYS	617	66.971	6.060	30.592	1.00	34.80
	ATOM	4742	CA	LYS	617	67.975	7.010	30.143	1.00	33.01
35	ATOM	4743	CB	LYS	617	68.508	6.620	28.776	1.00	33.18
	ATOM	4744	CG	LYS	617	69.224	5.302	28.797	1.00	35.64

	ATOM	4745	CD	LYS	617	70.423	5.380	29.710	1.00	40.31
	ATOM	4746	CE	LYS	617	71.075	4.025	29.863	1.00	43.03
	ATOM	4747	NZ	LYS	617	72.426	4.152	30.449	1.00	45.54
	ATOM	4751	C	LYS	617	67.360	8.397	30.102	1.00	32.87
	ATOM	4752	O	LYS	617	67.892	9.308	29.470	1.00	34.06
5	ATOM	4753	N	LYS	618	66.221	8.542	30.772	1.00	33.53
	ATOM	4755	CA	LYS	618	65.500	9.808	30.872	1.00	33.28
	ATOM	4756	CB	LYS	618	66.384	10.842	31.558	1.00	37.22
	ATOM	4757	CG	LYS	618	66.968	10.367	32.869	1.00	43.11
	ATOM	4758	CD	LYS	618	65.927	10.278	33.957	1.00	49.82
	ATOM	4759	CE	LYS	618	66.520	9.636	35.199	1.00	55.20
	ATOM	4760	NZ	LYS	618	65.669	9.853	36.415	1.00	61.31
	ATOM	4764	C	LYS	618	65.012	10.359	29.542	1.00	31.57
	ATOM	4765	O	LYS	618	64.651	11.530	29.455	1.00	31.10
10	ATOM	4766	N	CYS	619	64.953	9.506	28.524	1.00	31.04
	ATOM	4768	CA	CYS	619	64.519	9.922	27.196	1.00	29.21
	ATOM	4769	CB	CYS	619	65.213	9.065	26.125	1.00	28.55
	ATOM	4770	SG	CYS	619	64.782	9.400	24.392	1.00	26.31
	ATOM	4771	C	CYS	619	62.999	9.849	27.051	1.00	30.91
	ATOM	4772	O	CYS	619	62.376	8.827	27.364	1.00	31.18
	ATOM	4773	N	ILE	620	62.411	10.967	26.632	1.00	29.48
	ATOM	4775	CA	ILE	620	60.981	11.073	26.416	1.00	29.34
	ATOM	4776	CB	ILE	620	60.402	12.344	27.060	1.00	28.12
15	ATOM	4777	CG2	ILE	620	58.944	12.535	26.645	1.00	28.76
	ATOM	4778	CG1	ILE	620	60.521	12.267	28.581	1.00	28.36
	ATOM	4779	CD1	ILE	620	60.062	13.522	29.270	1.00	25.55
	ATOM	4780	C	ILE	620	60.852	11.188	24.908	1.00	30.97
	ATOM	4781	O	ILE	620	61.254	12.193	24.336	1.00	33.88
	ATOM	4782	N	HIS	621	60.307	10.147	24.284	1.00	31.55
	ATOM	4784	CA	HIS	621	60.148	10.080	22.831	1.00	31.85
	ATOM	4785	CB	HIS	621	59.721	8.668	22.425	1.00	28.27
	ATOM	4786	CG	HIS	621	59.913	8.373	20.979	1.00	24.68
20	ATOM	4787	CD2	HIS	621	60.608	7.383	20.356	1.00	24.39
	ATOM	4788	ND1	HIS	621	59.354	9.130	19.973	1.00	25.87
	ATOM	4790	CE1	HIS	621	59.691	8.623	18.798	1.00	27.65
	ATOM	4791	NE2	HIS	621	60.444	7.571	19.007	1.00	25.80
	ATOM	4793	C	HIS	621	59.187	11.096	22.224	1.00	34.38
	ATOM	4794	O	HIS	621	59.387	11.539	21.104	1.00	38.74
	ATOM	4795	N	ARG	622	58.080	11.374	22.898	1.00	37.17
	ATOM	4797	CA	ARG	622	57.093	12.346	22.425	1.00	37.27
	ATOM	4798	CB	ARG	622	57.718	13.746	22.298	1.00	38.63
25	ATOM	4799	CG	ARG	622	58.261	14.271	23.601	1.00	40.47
	ATOM	4800	CD	ARG	622	58.661	15.739	23.530	1.00	44.76
	ATOM	4801	NE	ARG	622	59.129	16.174	24.842	1.00	52.09
	ATOM	4803	CZ	ARG	622	60.299	15.821	25.375	1.00	56.86
	ATOM	4804	NH1	ARG	622	61.132	15.041	24.699	1.00	61.20
	ATOM	4807	NH2	ARG	622	60.606	16.167	26.624	1.00	58.19
	ATOM	4810	C	ARG	622	56.324	11.994	21.151	1.00	37.23
	ATOM	4811	O	ARG	622	55.300	12.614	20.867	1.00	38.45
	ATOM	4812	N	ASP	623	56.805	11.035	20.364	1.00	36.55
30	ATOM	4814	CA	ASP	623	56.075	10.652	19.160	1.00	36.52
	ATOM	4815	CB	ASP	623	56.581	11.403	17.910	1.00	39.68
	ATOM	4816	CG	ASP	623	55.635	11.247	16.687	1.00	48.75
	ATOM	4817	OD1	ASP	623	56.077	11.491	15.538	1.00	49.98
	ATOM	4818	OD2	ASP	623	54.445	10.879	16.872	1.00	49.65
	ATOM	4819	C	ASP	623	56.126	9.143	18.967	1.00	33.37
	ATOM	4820	O	ASP	623	56.325	8.650	17.864	1.00	31.77
	ATOM	4821	N	LEU	624	55.999	8.404	20.059	1.00	30.45
	ATOM	4823	CA	LEU	624	56.014	6.954	19.950	1.00	30.77
35	ATOM	4824	CB	LEU	624	55.983	6.307	21.342	1.00	27.43
	ATOM	4825	CG	LEU	624	55.949	4.778	21.441	1.00	28.69

	ATOM	4826	CD1	LEU	624	57.139	4.132	20.731	1.00	24.75
	ATOM	4827	CD2	LEU	624	55.927	4.389	22.894	1.00	27.39
	ATOM	4828	C	LEU	624	54.803	6.532	19.109	1.00	31.22
	ATOM	4829	O	LEU	624	53.680	6.952	19.380	1.00	33.44
5	ATOM	4830	N	ALA	625	55.053	5.763	18.054	1.00	28.85
	ATOM	4832	CA	ALA	625	54.009	5.286	17.159	1.00	26.93
	ATOM	4833	CB	ALA	625	53.559	6.400	16.227	1.00	25.03
	ATOM	4834	C	ALA	625	54.642	4.162	16.356	1.00	28.44
	ATOM	4835	O	ALA	625	55.863	4.065	16.317	1.00	31.32
	ATOM	4836	N	ALA	626	53.828	3.329	15.705	1.00	29.14
	ATOM	4838	CA	ALA	626	54.344	2.205	14.905	1.00	28.42
	ATOM	4839	CB	ALA	626	53.192	1.357	14.353	1.00	27.37
	ATOM	4840	C	ALA	626	55.231	2.698	13.771	1.00	26.38
10	ATOM	4841	O	ALA	626	56.195	2.041	13.395	1.00	26.12
	ATOM	4842	N	ARG	627	54.890	3.861	13.230	1.00	27.16
	ATOM	4844	CA	ARG	627	55.669	4.474	12.158	1.00	28.44
	ATOM	4845	CB	ARG	627	55.022	5.794	11.733	1.00	28.19
	ATOM	4846	CG	ARG	627	54.889	6.793	12.867	1.00	30.34
	ATOM	4847	CD	ARG	627	54.456	8.155	12.361	1.00	34.08
	ATOM	4848	NE	ARG	627	54.081	9.024	13.471	1.00	35.58
	ATOM	4850	CZ	ARG	627	52.849	9.123	13.950	1.00	35.55
	ATOM	4851	NH1	ARG	627	51.860	8.422	13.420	1.00	35.67
	ATOM	4854	NH2	ARG	627	52.618	9.898	14.993	1.00	40.81
15	ATOM	4857	C	ARG	627	57.108	4.733	12.630	1.00	28.06
	ATOM	4858	O	ARG	627	58.044	4.737	11.825	1.00	29.80
	ATOM	4859	N	ASN	628	57.272	4.935	13.940	1.00	28.50
	ATOM	4861	CA	ASN	628	58.582	5.195	14.544	1.00	26.14
	ATOM	4862	CB	ASN	628	58.494	6.340	15.551	1.00	23.55
	ATOM	4863	CG	ASN	628	58.319	7.681	14.874	1.00	27.48
	ATOM	4864	OD1	ASN	628	58.874	7.919	13.800	1.00	34.12
	ATOM	4865	ND2	ASN	628	57.543	8.556	15.479	1.00	23.21
	ATOM	4868	C	ASN	628	59.263	3.965	15.153	1.00	26.76
20	ATOM	4869	O	ASN	628	60.202	4.078	15.948	1.00	26.90
	ATOM	4870	N	VAL	629	58.774	2.794	14.767	1.00	27.02
	ATOM	4872	CA	VAL	629	59.344	1.523	15.186	1.00	27.81
	ATOM	4873	CB	VAL	629	58.298	0.622	15.864	1.00	26.83
	ATOM	4874	CG1	VAL	629	58.876	-0.766	16.115	1.00	20.74
	ATOM	4875	CG2	VAL	629	57.836	1.259	17.165	1.00	22.49
	ATOM	4876	C	VAL	629	59.781	0.895	13.861	1.00	28.61
	ATOM	4877	O	VAL	629	58.983	0.809	12.924	1.00	28.76
	ATOM	4878	N	LEU	630	61.059	0.557	13.746	1.00	30.35
25	ATOM	4880	CA	LEU	630	61.576	-0.033	12.514	1.00	32.42
	ATOM	4881	CB	LEU	630	62.824	0.725	12.040	1.00	32.28
	ATOM	4882	CG	LEU	630	62.697	2.249	11.880	1.00	27.75
	ATOM	4883	CD1	LEU	630	64.019	2.860	11.469	1.00	24.71
	ATOM	4884	CD2	LEU	630	61.611	2.582	10.872	1.00	27.70
	ATOM	4885	C	LEU	630	61.895	-1.488	12.799	1.00	32.89
	ATOM	4886	O	LEU	630	62.167	-1.838	13.943	1.00	32.32
	ATOM	4887	N	VAL	631	61.831	-2.336	11.774	1.00	34.81
	ATOM	4889	CA	VAL	631	62.087	-3.772	11.943	1.00	33.87
30	ATOM	4890	CB	VAL	631	60.818	-4.616	11.597	1.00	31.60
	ATOM	4891	CG1	VAL	631	60.929	-6.004	12.197	1.00	30.84
	ATOM	4892	CG2	VAL	631	59.545	-3.916	12.089	1.00	25.53
	ATOM	4893	C	VAL	631	63.286	-4.256	11.109	1.00	34.95
	ATOM	4894	O	VAL	631	63.365	-4.009	9.892	1.00	37.01
	ATOM	4895	N	THR	632	64.215	-4.942	11.770	1.00	35.08
	ATOM	4897	CA	THR	632	65.418	-5.444	11.104	1.00	35.96
	ATOM	4898	CB	THR	632	66.541	-5.711	12.116	1.00	34.29
	ATOM	4899	OG1	THR	632	66.187	-6.818	12.953	1.00	32.35
35	ATOM	4901	CG2	THR	632	66.750	-4.488	12.985	1.00	33.42
	ATOM	4902	C	THR	632	65.162	-6.712	10.300	1.00	39.32

	ATOM	4903	O	THR	632	64.078	-7.302	10.382	1.00	41.24
	ATOM	4904	N	GLU	633	66.153	-7.123	9.511	1.00	42.32
	ATOM	4906	CA	GLU	633	66.030	-8.335	8.703	1.00	44.34
	ATOM	4907	CB	GLU	633	67.314	-8.609	7.912	1.00	46.06
5	ATOM	4908	CG	GLU	633	67.205	-9.767	6.898	1.00	49.87
	ATOM	4909	CD	GLU	633	66.380	-9.445	5.629	1.00	53.04
	ATOM	4910	OE1	GLU	633	65.637	-8.430	5.570	1.00	51.31
	ATOM	4911	OE2	GLU	633	66.479	-10.226	4.667	1.00	55.48
	ATOM	4912	C	GLU	633	65.708	-9.526	9.600	1.00	44.58
	ATOM	4913	O	GLU	633	64.974	-10.423	9.207	1.00	46.56
	ATOM	4914	N	ASP	634	66.201	-9.493	10.833	1.00	44.12
	ATOM	4916	CA	ASP	634	65.961	-10.583	11.759	1.00	44.23
	ATOM	4917	CB	ASP	634	67.221	-10.867	12.580	1.00	50.17
	ATOM	4918	CG	ASP	634	68.443	-11.181	11.697	1.00	56.79
10	ATOM	4919	OD1	ASP	634	68.363	-12.113	10.857	1.00	59.62
	ATOM	4920	OD2	ASP	634	69.482	-10.490	11.837	1.00	58.62
	ATOM	4921	C	ASP	634	64.756	-10.331	12.644	1.00	43.26
	ATOM	4922	O	ASP	634	64.652	-10.879	13.733	1.00	43.58
	ATOM	4923	N	ASN	635	63.858	-9.475	12.166	1.00	43.97
	ATOM	4925	CA	ASN	635	62.612	-9.126	12.847	1.00	43.66
	ATOM	4926	CB	ASN	635	61.698	-10.355	12.930	1.00	46.94
	ATOM	4927	CG	ASN	635	61.413	-10.958	11.572	1.00	48.19
	ATOM	4928	OD1	ASN	635	60.831	-10.314	10.702	1.00	51.42
15	ATOM	4929	ND2	ASN	635	61.832	-12.198	11.380	1.00	49.44
	ATOM	4932	C	ASN	635	62.694	-8.463	14.216	1.00	43.03
	ATOM	4933	O	ASN	635	61.774	-8.596	15.031	1.00	43.03
	ATOM	4934	N	VAL	636	63.763	-7.712	14.467	1.00	42.69
	ATOM	4936	CA	VAL	636	63.915	-7.034	15.756	1.00	38.30
	ATOM	4937	CB	VAL	636	65.406	-6.861	16.134	1.00	37.92
	ATOM	4938	CG1	VAL	636	65.555	-6.040	17.421	1.00	37.14
	ATOM	4939	CG2	VAL	636	66.052	-8.226	16.306	1.00	37.55
	ATOM	4940	C	VAL	636	63.251	-5.673	15.688	1.00	35.75
20	ATOM	4941	O	VAL	636	63.486	-4.926	14.746	1.00	36.28
	ATOM	4942	N	MET	637	62.355	-5.396	16.628	1.00	34.73
	ATOM	4944	CA	MET	637	61.672	-4.103	16.680	1.00	33.22
	ATOM	4945	CB	MET	637	60.456	-4.152	17.608	1.00	34.83
	ATOM	4946	CG	MET	637	59.364	-5.148	17.231	1.00	34.41
	ATOM	4947	SD	MET	637	58.661	-4.926	15.589	1.00	33.19
	ATOM	4948	CE	MET	637	58.869	-6.584	14.913	1.00	29.73
	ATOM	4949	C	MET	637	62.677	-3.107	17.250	1.00	33.75
	ATOM	4950	O	MET	637	63.281	-3.357	18.308	1.00	31.79
25	ATOM	4951	N	LYS	638	62.839	-1.980	16.558	1.00	31.83
	ATOM	4953	CA	LYS	638	63.774	-0.939	16.965	1.00	28.17
	ATOM	4954	CB	LYS	638	64.986	-0.930	16.038	1.00	24.98
	ATOM	4955	CG	LYS	638	66.006	-1.967	16.400	1.00	23.17
	ATOM	4956	CD	LYS	638	67.193	-1.916	15.470	1.00	25.04
	ATOM	4957	CE	LYS	638	68.212	-2.969	15.847	1.00	24.79
	ATOM	4958	NZ	LYS	638	68.747	-2.765	17.220	1.00	24.91
	ATOM	4962	C	LYS	638	63.165	0.445	16.986	1.00	26.04
	ATOM	4963	O	LYS	638	62.803	0.958	15.936	1.00	24.44
30	ATOM	4964	N	ILE	639	63.052	1.031	18.181	1.00	25.14
	ATOM	4966	CA	ILE	639	62.508	2.376	18.351	1.00	25.68
	ATOM	4967	CB	ILE	639	62.589	2.863	19.839	1.00	27.40
	ATOM	4968	CG2	ILE	639	61.875	4.189	19.984	1.00	18.94
	ATOM	4969	CG1	ILE	639	62.019	1.827	20.826	1.00	26.05
	ATOM	4970	CD1	ILE	639	60.517	1.667	20.792	1.00	25.07
	ATOM	4971	C	ILE	639	63.387	3.338	17.543	1.00	25.82
	ATOM	4972	O	ILE	639	64.619	3.283	17.642	1.00	25.76
	ATOM	4973	N	ALA	640	62.758	4.231	16.783	1.00	25.92
35	ATOM	4975	CA	ALA	640	63.477	5.218	15.976	1.00	26.12
	ATOM	4976	CB	ALA	640	63.222	4.964	14.506	1.00	26.54

	ATOM	4977	C	ALA	640	63.042	6.643	16.344	1.00	26.33
	ATOM	4978	O	ALA	640	61.996	6.828	16.974	1.00	26.20
	ATOM	4979	N	ASP	641	63.863	7.637	15.993	1.00	26.59
	ATOM	4981	CA	ASP	641	63.545	9.052	16.245	1.00	28.09
5	ATOM	4982	CB	ASP	641	62.217	9.443	15.593	1.00	31.43
	ATOM	4983	CG	ASP	641	62.346	9.762	14.107	1.00	36.81
	ATOM	4984	OD1	ASP	641	63.409	9.478	13.500	1.00	40.24
	ATOM	4985	OD2	ASP	641	61.356	10.299	13.548	1.00	40.49
	ATOM	4986	C	ASP	641	63.455	9.442	17.700	1.00	28.40
	ATOM	4987	O	ASP	641	62.825	10.446	18.041	1.00	29.30
	ATOM	4988	N	PHE	642	64.080	8.658	18.564	1.00	30.27
	ATOM	4990	CA	PHE	642	64.044	8.943	19.992	1.00	30.97
	ATOM	4991	CB	PHE	642	64.327	7.664	20.787	1.00	24.64
	ATOM	4992	CG	PHE	642	65.673	7.063	20.505	1.00	20.96
10	ATOM	4993	CD1	PHE	642	66.812	7.539	21.163	1.00	16.89
	ATOM	4994	CD2	PHE	642	65.806	6.026	19.576	1.00	16.23
	ATOM	4995	CE1	PHE	642	68.072	6.990	20.900	1.00	18.35
	ATOM	4996	CE2	PHE	642	67.051	5.471	19.305	1.00	18.76
	ATOM	4997	CZ	PHE	642	68.195	5.954	19.970	1.00	17.91
	ATOM	4998	C	PHE	642	65.024	10.045	20.414	1.00	34.53
	ATOM	4999	O	PHE	642	64.990	10.503	21.563	1.00	35.23
	ATOM	5000	N	GLY	643	65.910	10.433	19.500	1.00	36.40
15	ATOM	5002	CA	GLY	643	66.888	11.455	19.799	1.00	38.28
	ATOM	5003	C	GLY	643	66.634	12.768	19.093	1.00	41.44
	ATOM	5004	O	GLY	643	67.482	13.652	19.132	1.00	44.10
	ATOM	5005	N	LEU	644	65.461	12.921	18.484	1.00	45.44
	ATOM	5007	CA	LEU	644	65.131	14.144	17.748	1.00	49.14
	ATOM	5008	CB	LEU	644	63.832	13.975	16.969	1.00	46.26
	ATOM	5009	CG	LEU	644	63.823	12.967	15.836	1.00	42.90
	ATOM	5010	CD1	LEU	644	62.527	13.134	15.070	1.00	42.68
	ATOM	5011	CD2	LEU	644	65.004	13.228	14.934	1.00	45.15
	ATOM	5012	C	LEU	644	65.027	15.396	18.605	1.00	53.90
20	ATOM	5013	O	LEU	644	64.488	15.356	19.715	1.00	56.54
	ATOM	5014	N	ALA	645	65.534	16.505	18.068	1.00	57.59
	ATOM	5016	CA	ALA	645	65.505	17.794	18.759	1.00	60.15
	ATOM	5017	CB	ALA	645	66.539	18.741	18.156	1.00	59.55
	ATOM	5018	C	ALA	645	64.112	18.407	18.667	1.00	61.90
	ATOM	5019	O	ALA	645	63.393	18.500	19.663	1.00	63.83
	ATOM	5020	N	ASP	652	52.090	22.191	14.865	1.00	89.91
	ATOM	5022	CA	ASP	652	50.913	22.199	14.007	1.00	89.75
	ATOM	5023	CB	ASP	652	51.314	22.428	12.537	1.00	88.08
25	ATOM	5024	CG	ASP	652	50.109	22.557	11.607	1.00	87.09
	ATOM	5025	OD1	ASP	652	49.028	22.996	12.052	1.00	86.85
	ATOM	5026	OD2	ASP	652	50.252	22.222	10.411	1.00	86.69
	ATOM	5027	C	ASP	652	50.145	20.890	14.156	1.00	89.98
	ATOM	5028	O	ASP	652	50.434	19.899	13.483	1.00	90.19
	ATOM	5029	N	TYR	653	49.145	20.905	15.027	1.00	90.26
	ATOM	5031	CA	TYR	653	48.318	19.730	15.277	1.00	90.78
	ATOM	5032	CB	TYR	653	47.272	20.048	16.344	1.00	91.65
	ATOM	5033	CG	TYR	653	47.804	20.185	17.755	1.00	93.43
30	ATOM	5034	CD1	TYR	653	47.017	20.757	18.752	1.00	94.60
	ATOM	5035	CE1	TYR	653	47.477	20.885	20.058	1.00	95.35
	ATOM	5036	CD2	TYR	653	49.083	19.738	18.101	1.00	93.46
	ATOM	5037	CE2	TYR	653	49.558	19.860	19.406	1.00	94.36
	ATOM	5038	CZ	TYR	653	48.748	20.435	20.378	1.00	95.26
	ATOM	5039	OH	TYR	653	49.220	20.554	21.669	1.00	95.00
	ATOM	5041	C	TYR	653	47.602	19.231	14.021	1.00	90.47
	ATOM	5042	O	TYR	653	47.045	18.131	14.012	1.00	91.33
	ATOM	5043	N	TYR	654	47.632	20.031	12.962	1.00	89.21
35	ATOM	5045	CA	TYR	654	46.954	19.673	11.727	1.00	89.09
	ATOM	5046	CB	TYR	654	46.205	20.893	11.188	1.00	88.23

	ATOM	5047	CG	TYR	654	45.275	21.499	12.209	1.00	87.65
	ATOM	5048	CD1	TYR	654	45.776	22.140	13.343	1.00	86.76
	ATOM	5049	CE1	TYR	654	44.929	22.655	14.312	1.00	87.17
	ATOM	5050	CD2	TYR	654	43.895	21.396	12.067	1.00	88.61
5	ATOM	5051	CE2	TYR	654	43.032	21.912	13.033	1.00	89.32
	ATOM	5052	CZ	TYR	654	43.557	22.538	14.153	1.00	88.66
	ATOM	5053	OH	TYR	654	42.710	23.034	15.117	1.00	89.39
	ATOM	5055	C	TYR	654	47.857	19.080	10.651	1.00	89.49
	ATOM	5056	O	TYR	654	47.396	18.772	9.552	1.00	88.37
	ATOM	5057	N	LYS	655	49.139	18.919	10.959	1.00	90.80
	ATOM	5059	CA	LYS	655	50.056	18.356	9.982	1.00	93.18
	ATOM	5060	CB	LYS	655	51.508	18.713	10.311	1.00	95.66
	ATOM	5061	CG	LYS	655	52.504	18.133	9.315	1.00	99.82
10	ATOM	5062	CD	LYS	655	53.932	18.585	9.562	1.00	103.58
	ATOM	5063	CE	LYS	655	54.898	17.833	8.637	1.00	106.15
	ATOM	5064	NZ	LYS	655	56.325	18.246	8.821	1.00	108.43
	ATOM	5068	C	LYS	655	49.884	16.847	9.935	1.00	93.56
	ATOM	5069	O	LYS	655	49.904	16.182	10.972	1.00	93.72
	ATOM	5070	N	LYS	656	49.670	16.320	8.735	1.00	94.19
	ATOM	5072	CA	LYS	656	49.500	14.886	8.545	1.00	94.84
	ATOM	5073	CB	LYS	656	48.628	14.620	7.320	1.00	94.64
	ATOM	5074	CG	LYS	656	47.155	14.874	7.542	1.00	95.54
	ATOM	5075	CD	LYS	656	46.402	14.709	6.241	1.00	99.56
15	ATOM	5076	CE	LYS	656	44.926	14.449	6.473	1.00	101.77
	ATOM	5077	NZ	LYS	656	44.202	14.327	5.173	1.00	103.77
	ATOM	5081	C	LYS	656	50.859	14.225	8.368	1.00	95.18
	ATOM	5082	O	LYS	656	51.823	14.878	7.956	1.00	95.74
	ATOM	5083	N	GLY	660	48.651	9.665	5.782	1.00	58.76
	ATOM	5085	CA	GLY	660	47.932	10.910	6.012	1.00	56.04
	ATOM	5086	C	GLY	660	47.241	10.937	7.364	1.00	53.90
	ATOM	5087	O	GLY	660	46.183	11.552	7.525	1.00	53.92
	ATOM	5088	N	ARG	661	47.838	10.243	8.328	1.00	51.87
20	ATOM	5090	CA	ARG	661	47.297	10.177	9.679	1.00	48.23
	ATOM	5091	CB	ARG	661	47.755	8.891	10.377	1.00	49.74
	ATOM	5092	CG	ARG	661	47.506	7.620	9.566	1.00	47.59
	ATOM	5093	CD	ARG	661	47.561	6.390	10.446	1.00	51.85
	ATOM	5094	NE	ARG	661	47.584	5.155	9.663	1.00	52.94
	ATOM	5096	CZ	ARG	661	48.035	3.988	10.117	1.00	52.19
	ATOM	5097	NH1	ARG	661	48.503	3.884	11.356	1.00	52.10
	ATOM	5100	NH2	ARG	661	48.036	2.926	9.327	1.00	54.43
	ATOM	5103	C	ARG	661	47.722	11.401	10.483	1.00	43.67
25	ATOM	5104	O	ARG	661	48.658	12.103	10.104	1.00	41.45
	ATOM	5105	N	LEU	662	47.019	11.656	11.579	1.00	40.27
	ATOM	5107	CA	LEU	662	47.310	12.799	12.437	1.00	37.15
	ATOM	5108	CB	LEU	662	46.021	13.533	12.783	1.00	37.39
	ATOM	5109	CG	LEU	662	45.301	14.149	11.588	1.00	37.67
	ATOM	5110	CD1	LEU	662	43.852	14.428	11.937	1.00	35.38
	ATOM	5111	CD2	LEU	662	46.041	15.407	11.163	1.00	39.79
	ATOM	5112	C	LEU	662	47.973	12.330	13.716	1.00	34.68
	ATOM	5113	O	LEU	662	47.327	11.718	14.568	1.00	33.33
30	ATOM	5114	N	PRO	663	49.260	12.655	13.892	1.00	34.11
	ATOM	5115	CD	PRO	663	50.086	13.389	12.924	1.00	33.67
	ATOM	5116	CA	PRO	663	50.052	12.281	15.068	1.00	33.55
	ATOM	5117	CB	PRO	663	51.367	13.003	14.833	1.00	32.99
	ATOM	5118	CG	PRO	663	51.479	12.966	13.328	1.00	36.09
	ATOM	5119	C	PRO	663	49.412	12.665	16.399	1.00	33.55
	ATOM	5120	O	PRO	663	49.683	12.036	17.426	1.00	34.11
	ATOM	5121	N	VAL	664	48.566	13.697	16.387	1.00	32.63
	ATOM	5123	CA	VAL	664	47.874	14.092	17.613	1.00	32.24
35	ATOM	5124	CB	VAL	664	46.953	15.327	17.396	1.00	33.24
	ATOM	5125	CG1	VAL	664	47.779	16.583	17.252	1.00	35.01

	ATOM	5126	CG2	VAL	664	46.089	15.154	16.155	1.00	35.44
	ATOM	5127	C	VAL	664	47.072	12.896	18.150	1.00	31.08
	ATOM	5128	O	VAL	664	46.866	12.760	19.360	1.00	31.49
	ATOM	5129	N	LYS	665	46.710	11.978	17.255	1.00	29.75
5	ATOM	5131	CA	LYS	665	45.956	10.788	17.638	1.00	28.83
	ATOM	5132	CB	LYS	665	45.411	10.083	16.397	1.00	29.52
	ATOM	5133	CG	LYS	665	44.242	10.835	15.797	1.00	27.21
	ATOM	5134	CD	LYS	665	43.905	10.431	14.397	1.00	27.25
	ATOM	5135	CE	LYS	665	42.684	11.228	13.931	1.00	28.63
	ATOM	5136	NZ	LYS	665	42.266	10.902	12.545	1.00	25.33
	ATOM	5140	C	LYS	665	46.718	9.830	18.537	1.00	29.03
	ATOM	5141	O	LYS	665	46.152	8.869	19.046	1.00	28.37
	ATOM	5142	N	TRP	666	47.994	10.123	18.765	1.00	30.40
10	ATOM	5144	CA	TRP	666	48.825	9.296	19.628	1.00	31.10
	ATOM	5145	CB	TRP	666	50.123	8.906	18.917	1.00	29.53
	ATOM	5146	CG	TRP	666	49.946	7.781	17.966	1.00	27.03
	ATOM	5147	CD2	TRP	666	49.407	7.853	16.638	1.00	25.06
	ATOM	5148	CE2	TRP	666	49.418	6.546	16.116	1.00	23.83
	ATOM	5149	CE3	TRP	666	48.924	8.899	15.835	1.00	26.08
	ATOM	5150	CD1	TRP	666	50.257	6.475	18.186	1.00	20.75
	ATOM	5151	NE1	TRP	666	49.937	5.729	17.086	1.00	24.92
	ATOM	5153	CZ2	TRP	666	48.962	6.245	14.832	1.00	23.95
15	ATOM	5154	CZ3	TRP	666	48.466	8.604	14.548	1.00	29.09
	ATOM	5155	CH2	TRP	666	48.491	7.282	14.060	1.00	29.22
	ATOM	5156	C	TRP	666	49.174	10.049	20.896	1.00	33.20
	ATOM	5157	O	TRP	666	49.701	9.469	21.849	1.00	34.39
	ATOM	5158	N	MET	667	48.862	11.340	20.910	1.00	34.82
	ATOM	5160	CA	MET	667	49.169	12.175	22.056	1.00	36.31
	ATOM	5161	CB	MET	667	49.205	13.645	21.651	1.00	40.08
	ATOM	5162	CG	MET	667	50.475	14.047	20.931	1.00	42.41
	ATOM	5163	SD	MET	667	50.555	15.818	20.713	1.00	51.31
20	ATOM	5164	CE	MET	667	50.957	15.928	18.949	1.00	45.44
	ATOM	5165	C	MET	667	48.299	12.003	23.287	1.00	37.81
	ATOM	5166	O	MET	667	47.081	11.871	23.195	1.00	38.91
	ATOM	5167	N	ALA	668	48.958	11.964	24.442	1.00	36.47
	ATOM	5169	CA	ALA	668	48.286	11.846	25.718	1.00	37.06
	ATOM	5170	CB	ALA	668	49.308	11.654	26.835	1.00	35.76
	ATOM	5171	C	ALA	668	47.548	13.161	25.893	1.00	38.76
	ATOM	5172	O	ALA	668	48.000	14.201	25.414	1.00	38.04
	ATOM	5173	N	PRO	669	46.416	13.142	26.608	1.00	41.60
25	ATOM	5174	CD	PRO	669	45.819	11.981	27.282	1.00	41.64
	ATOM	5175	CA	PRO	669	45.614	14.347	26.841	1.00	43.25
	ATOM	5176	CB	PRO	669	44.478	13.827	27.718	1.00	45.08
	ATOM	5177	CG	PRO	669	44.383	12.368	27.325	1.00	44.04
	ATOM	5178	C	PRO	669	46.390	15.486	27.526	1.00	44.68
	ATOM	5179	O	PRO	669	46.304	16.644	27.111	1.00	43.79
	ATOM	5180	N	GLU	670	47.135	15.164	28.580	1.00	44.29
	ATOM	5182	CA	GLU	670	47.905	16.195	29.266	1.00	45.36
	ATOM	5183	CB	GLU	670	48.596	15.637	30.509	1.00	46.97
30	ATOM	5184	CG	GLU	670	49.858	14.819	30.243	1.00	50.04
	ATOM	5185	CD	GLU	670	49.588	13.345	30.070	1.00	51.35
	ATOM	5186	OE1	GLU	670	50.512	12.552	30.327	1.00	50.99
	ATOM	5187	OE2	GLU	670	48.458	12.975	29.700	1.00	52.70
	ATOM	5188	C	GLU	670	48.942	16.802	28.320	1.00	45.63
	ATOM	5189	O	GLU	670	49.174	18.006	28.340	1.00	44.75
	ATOM	5190	N	ALA	671	49.546	15.962	27.482	1.00	46.18
	ATOM	5192	CA	ALA	671	50.555	16.406	26.531	1.00	46.44
	ATOM	5193	CB	ALA	671	51.218	15.203	25.860	1.00	43.27
	ATOM	5194	C	ALA	671	49.931	17.313	25.483	1.00	47.85
35	ATOM	5195	O	ALA	671	50.485	18.355	25.150	1.00	47.61
	ATOM	5196	N	LEU	672	48.748	16.928	25.018	1.00	51.40

	ATOM	5198	CA	LEU	672	48.010	17.657	23.990	1.00	54.25
	ATOM	5199	CB	LEU	672	46.996	16.705	23.346	1.00	55.60
	ATOM	5200	CG	LEU	672	46.202	17.113	22.105	1.00	58.92
	ATOM	5201	CD1	LEU	672	47.114	17.425	20.932	1.00	58.60
	ATOM	5202	CD2	LEU	672	45.269	15.977	21.753	1.00	60.32
5	ATOM	5203	C	LEU	672	47.315	18.925	24.514	1.00	55.91
	ATOM	5204	O	LEU	672	47.289	19.958	23.837	1.00	55.72
	ATOM	5205	N	PHE	673	46.782	18.846	25.730	1.00	57.88
	ATOM	5207	CA	PHE	673	46.089	19.977	26.342	1.00	60.07
	ATOM	5208	CB	PHE	673	44.873	19.484	27.127	1.00	57.08
	ATOM	5209	CG	PHE	673	43.876	18.742	26.290	1.00	56.39
	ATOM	5210	CD1	PHE	673	43.191	17.653	26.813	1.00	57.67
	ATOM	5211	CD2	PHE	673	43.633	19.116	24.970	1.00	55.36
	ATOM	5212	CE1	PHE	673	42.281	16.939	26.036	1.00	57.42
10	ATOM	5213	CE2	PHE	673	42.724	18.410	24.183	1.00	55.91
	ATOM	5214	CZ	PHE	673	42.049	17.317	24.720	1.00	56.42
	ATOM	5215	C	PHE	673	46.974	20.854	27.238	1.00	63.00
	ATOM	5216	O	PHE	673	46.926	22.085	27.155	1.00	65.31
	ATOM	5217	N	ASP	674	47.786	20.223	28.081	1.00	64.08
	ATOM	5219	CA	ASP	674	48.656	20.954	28.999	1.00	64.97
	ATOM	5220	CB	ASP	674	48.545	20.375	30.409	1.00	65.13
	ATOM	5221	CG	ASP	674	47.128	20.358	30.923	1.00	67.33
	ATOM	5222	OD1	ASP	674	46.684	19.283	31.372	1.00	66.68
15	ATOM	5223	OD2	ASP	674	46.462	21.416	30.869	1.00	69.20
	ATOM	5224	C	ASP	674	50.132	20.971	28.603	1.00	66.38
	ATOM	5225	O	ASP	674	50.984	21.304	29.434	1.00	68.44
	ATOM	5226	N	ARG	675	50.441	20.585	27.365	1.00	65.68
	ATOM	5228	CA	ARG	675	51.829	20.550	26.883	1.00	63.71
	ATOM	5229	CB	ARG	675	52.321	21.970	26.576	1.00	63.67
	ATOM	5230	CG	ARG	675	51.491	22.685	25.531	1.00	67.65
	ATOM	5231	CD	ARG	675	52.094	24.034	25.146	1.00	73.20
	ATOM	5232	NE	ARG	675	53.382	23.911	24.457	1.00	74.09
20	ATOM	5234	CZ	ARG	675	54.159	24.939	24.122	1.00	73.41
	ATOM	5235	NH1	ARG	675	53.788	26.182	24.408	1.00	72.90
	ATOM	5238	NH2	ARG	675	55.324	24.720	23.524	1.00	71.96
	ATOM	5241	C	ARG	675	52.780	19.864	27.876	1.00	61.41
	ATOM	5242	O	ARG	675	53.960	20.208	27.966	1.00	62.62
	ATOM	5243	N	ILE	676	52.248	18.903	28.627	1.00	59.15
	ATOM	5245	CA	ILE	676	53.016	18.162	29.623	1.00	56.88
	ATOM	5246	CB	ILE	676	52.175	17.904	30.891	1.00	56.26
	ATOM	5247	CG2	ILE	676	52.871	16.904	31.807	1.00	53.11
25	ATOM	5248	CG1	ILE	676	51.920	19.224	31.614	1.00	57.86
	ATOM	5249	CD1	ILE	676	51.038	19.096	32.835	1.00	61.05
	ATOM	5250	C	ILE	676	53.494	16.828	29.070	1.00	56.58
	ATOM	5251	O	ILE	676	52.727	15.869	28.985	1.00	58.12
	ATOM	5252	N	TYR	677	54.760	16.773	28.680	1.00	54.34
	ATOM	5254	CA	TYR	677	55.340	15.556	28.143	1.00	51.14
	ATOM	5255	CB	TYR	677	56.240	15.868	26.954	1.00	52.37
	ATOM	5256	CG	TYR	677	55.488	16.315	25.719	1.00	56.21
	ATOM	5257	CD1	TYR	677	55.187	17.660	25.512	1.00	56.78
30	ATOM	5258	CE1	TYR	677	54.534	18.086	24.353	1.00	57.54
	ATOM	5259	CD2	TYR	677	55.113	15.395	24.738	1.00	57.82
	ATOM	5260	CE2	TYR	677	54.458	15.809	23.571	1.00	59.32
	ATOM	5261	CZ	TYR	677	54.177	17.159	23.385	1.00	59.59
	ATOM	5262	OH	TYR	677	53.557	17.589	22.230	1.00	60.15
	ATOM	5264	C	TYR	677	56.124	14.854	29.224	1.00	48.64
	ATOM	5265	O	TYR	677	57.040	15.430	29.812	1.00	50.45
	ATOM	5266	N	THR	678	55.733	13.621	29.510	1.00	44.59
	ATOM	5268	CA	THR	678	56.397	12.834	30.524	1.00	42.21
35	ATOM	5269	CB	THR	678	55.524	12.726	31.791	1.00	43.55
	ATOM	5270	OG1	THR	678	54.302	12.045	31.475	1.00	47.42

	ATOM	5272	CG2	THR	678	55.190	14.105	32.327	1.00	48.74
	ATOM	5273	C	THR	678	56.634	11.432	29.992	1.00	39.94
	ATOM	5274	O	THR	678	56.207	11.085	28.892	1.00	39.34
	ATOM	5275	N	HIS	679	57.312	10.616	30.784	1.00	38.54
5	ATOM	5277	CA	HIS	679	57.532	9.248	30.390	1.00	38.29
	ATOM	5278	CB	HIS	679	58.441	8.546	31.391	1.00	39.51
	ATOM	5279	CG	HIS	679	59.869	8.997	31.331	1.00	43.13
	ATOM	5280	CD2	HIS	679	60.630	9.668	32.233	1.00	43.49
	ATOM	5281	ND1	HIS	679	60.694	8.726	30.263	1.00	43.00
	ATOM	5283	CE1	HIS	679	61.903	9.201	30.510	1.00	43.62
	ATOM	5284	NE2	HIS	679	61.889	9.778	31.695	1.00	44.68
	ATOM	5286	C	HIS	679	56.147	8.599	30.359	1.00	39.42
	ATOM	5287	O	HIS	679	55.898	7.667	29.593	1.00	40.00
10	ATOM	5288	N	GLN	680	55.228	9.156	31.142	1.00	38.96
	ATOM	5290	CA	GLN	680	53.867	8.649	31.209	1.00	38.84
	ATOM	5291	CB	GLN	680	53.214	9.010	32.543	1.00	40.90
	ATOM	5292	CG	GLN	680	53.835	8.278	33.732	1.00	44.42
	ATOM	5293	CD	GLN	680	53.677	6.756	33.660	1.00	44.47
	ATOM	5294	OE1	GLN	680	52.595	6.225	33.908	1.00	45.52
	ATOM	5295	NE2	GLN	680	54.767	6.050	33.348	1.00	42.06
	ATOM	5298	C	GLN	680	53.013	9.099	30.036	1.00	38.25
	ATOM	5299	O	GLN	680	51.968	8.505	29.758	1.00	39.27
15	ATOM	5300	N	SER	681	53.427	10.155	29.349	1.00	37.00
	ATOM	5302	CA	SER	681	52.665	10.571	28.182	1.00	38.02
	ATOM	5303	CB	SER	681	52.929	12.034	27.813	1.00	40.29
	ATOM	5304	OG	SER	681	54.307	12.286	27.620	1.00	47.29
	ATOM	5306	C	SER	681	53.066	9.620	27.051	1.00	37.43
	ATOM	5307	O	SER	681	52.289	9.366	26.136	1.00	37.86
	ATOM	5308	N	ASP	682	54.281	9.077	27.162	1.00	35.23
	ATOM	5310	CA	ASP	682	54.800	8.106	26.205	1.00	33.24
	ATOM	5311	CB	ASP	682	56.284	7.820	26.464	1.00	31.85
	ATOM	5312	CG	ASP	682	57.224	8.732	25.677	1.00	34.18
20	ATOM	5313	OD1	ASP	682	58.445	8.537	25.826	1.00	31.79
	ATOM	5314	OD2	ASP	682	56.763	9.620	24.908	1.00	29.15
	ATOM	5315	C	ASP	682	54.015	6.810	26.374	1.00	31.52
	ATOM	5316	O	ASP	682	53.788	6.087	25.411	1.00	31.93
	ATOM	5317	N	VAL	683	53.653	6.499	27.617	1.00	33.14
	ATOM	5319	CA	VAL	683	52.879	5.293	27.935	1.00	32.79
	ATOM	5320	CB	VAL	683	52.725	5.095	29.478	1.00	34.56
	ATOM	5321	CG1	VAL	683	51.653	4.059	29.790	1.00	32.39
	ATOM	5322	CG2	VAL	683	54.050	4.649	30.088	1.00	28.08
25	ATOM	5323	C	VAL	683	51.506	5.338	27.245	1.00	31.45
	ATOM	5324	O	VAL	683	51.008	4.311	26.779	1.00	30.37
	ATOM	5325	N	TRP	684	50.919	6.531	27.147	1.00	31.04
	ATOM	5327	CA	TRP	684	49.638	6.686	26.464	1.00	31.23
	ATOM	5328	CB	TRP	684	49.158	8.137	26.525	1.00	34.14
	ATOM	5329	CG	TRP	684	47.913	8.423	25.694	1.00	37.17
	ATOM	5330	CD2	TRP	684	46.573	8.593	26.187	1.00	38.61
	ATOM	5331	CE2	TRP	684	45.755	8.888	25.064	1.00	37.91
	ATOM	5332	CE3	TRP	684	45.978	8.528	27.452	1.00	37.63
30	ATOM	5333	CD1	TRP	684	47.850	8.612	24.337	1.00	37.39
	ATOM	5334	NE1	TRP	684	46.560	8.894	23.956	1.00	34.76
	ATOM	5336	CZ2	TRP	684	44.380	9.118	25.181	1.00	34.79
	ATOM	5337	CZ3	TRP	684	44.611	8.759	27.563	1.00	38.53
	ATOM	5338	CH2	TRP	684	43.830	9.048	26.428	1.00	37.59
	ATOM	5339	C	TRP	684	49.876	6.294	25.013	1.00	29.99
	ATOM	5340	O	TRP	684	49.254	5.356	24.503	1.00	30.82
	ATOM	5341	N	SER	685	50.815	6.992	24.380	1.00	28.28
	ATOM	5343	CA	SER	685	51.174	6.738	22.986	1.00	27.54
35	ATOM	5344	CB	SER	685	52.444	7.504	22.631	1.00	26.69
	ATOM	5345	OG	SER	685	52.355	8.874	22.986	1.00	32.15

	ATOM	5347	C	SER	685	51.399	5.249	22.737	1.00	26.41
	ATOM	5348	O	SER	685	50.968	4.709	21.713	1.00	29.52
	ATOM	5349	N	PHE	686	52.065	4.582	23.676	1.00	26.47
	ATOM	5351	CA	PHE	686	52.325	3.151	23.563	1.00	26.35
5	ATOM	5352	CB	PHE	686	53.167	2.668	24.754	1.00	25.01
	ATOM	5353	CG	PHE	686	53.447	1.182	24.742	1.00	27.24
	ATOM	5354	CD1	PHE	686	54.187	0.600	23.712	1.00	24.88
	ATOM	5355	CD2	PHE	686	52.915	0.351	25.729	1.00	24.99
	ATOM	5356	CE1	PHE	686	54.389	-0.783	23.655	1.00	22.77
	ATOM	5357	CE2	PHE	686	53.113	-1.036	25.679	1.00	28.39
	ATOM	5358	CZ	PHE	686	53.853	-1.601	24.631	1.00	22.71
	ATOM	5359	C	PHE	686	50.997	2.366	23.466	1.00	28.82
	ATOM	5360	O	PHE	686	50.892	1.398	22.696	1.00	26.41
10	ATOM	5361	N	GLY	687	49.988	2.797	24.229	1.00	29.65
	ATOM	5363	CA	GLY	687	48.692	2.134	24.194	1.00	29.88
	ATOM	5364	C	GLY	687	48.099	2.158	22.794	1.00	29.57
	ATOM	5365	O	GLY	687	47.560	1.165	22.300	1.00	30.38
	ATOM	5366	N	VAL	688	48.222	3.310	22.147	1.00	29.19
	ATOM	5368	CA	VAL	688	47.718	3.478	20.795	1.00	25.09
	ATOM	5369	CB	VAL	688	47.747	4.956	20.359	1.00	22.52
	ATOM	5370	CG1	VAL	688	47.106	5.115	18.985	1.00	21.13
	ATOM	5371	CG2	VAL	688	47.001	5.810	21.366	1.00	22.50
15	ATOM	5372	C	VAL	688	48.574	2.636	19.865	1.00	23.82
	ATOM	5373	O	VAL	688	48.080	2.132	18.871	1.00	25.39
	ATOM	5374	N	LEU	689	49.849	2.463	20.208	1.00	24.46
	ATOM	5376	CA	LEU	689	50.764	1.655	19.401	1.00	25.68
	ATOM	5377	CB	LEU	689	52.222	1.893	19.834	1.00	25.93
	ATOM	5378	CG	LEU	689	53.374	1.307	19.004	1.00	25.01
	ATOM	5379	CD1	LEU	689	54.655	2.080	19.257	1.00	25.86
	ATOM	5380	CD2	LEU	689	53.593	-0.145	19.318	1.00	24.90
	ATOM	5381	C	LEU	689	50.374	0.171	19.531	1.00	26.50
20	ATOM	5382	O	LEU	689	50.464	-0.578	18.558	1.00	27.13
	ATOM	5383	N	LEU	690	49.927	-0.234	20.724	1.00	27.76
	ATOM	5385	CA	LEU	690	49.481	-1.610	20.980	1.00	28.59
	ATOM	5386	CB	LEU	690	49.087	-1.800	22.447	1.00	30.38
	ATOM	5387	CG	LEU	690	50.121	-2.065	23.545	1.00	29.57
	ATOM	5388	CD1	LEU	690	49.435	-1.966	24.907	1.00	27.40
	ATOM	5389	CD2	LEU	690	50.744	-3.431	23.360	1.00	28.79
	ATOM	5390	C	LEU	690	48.242	-1.849	20.134	1.00	28.77
	ATOM	5391	O	LEU	690	48.055	-2.922	19.573	1.00	28.07
25	ATOM	5392	N	TRP	691	47.383	-0.838	20.075	1.00	29.58
	ATOM	5394	CA	TRP	691	46.166	-0.921	19.275	1.00	30.53
	ATOM	5395	CB	TRP	691	45.327	0.349	19.451	1.00	28.28
	ATOM	5396	CG	TRP	691	43.985	0.300	18.769	1.00	25.86
	ATOM	5397	CD2	TRP	691	43.702	0.689	17.421	1.00	23.99
	ATOM	5398	CE2	TRP	691	42.321	0.498	17.215	1.00	25.08
	ATOM	5399	CE3	TRP	691	44.487	1.165	16.367	1.00	20.88
	ATOM	5400	CD1	TRP	691	42.791	-0.090	19.314	1.00	23.72
	ATOM	5401	NE1	TRP	691	41.786	0.031	18.389	1.00	26.15
30	ATOM	5403	CZ2	TRP	691	41.704	0.788	15.997	1.00	25.07
	ATOM	5404	CZ3	TRP	691	43.883	1.448	15.163	1.00	22.80
	ATOM	5405	CH2	TRP	691	42.501	1.251	14.982	1.00	24.95
	ATOM	5406	C	TRP	691	46.566	-1.116	17.811	1.00	30.63
	ATOM	5407	O	TRP	691	45.943	-1.892	17.093	1.00	33.02
	ATOM	5408	N	GLU	692	47.625	-0.431	17.386	1.00	31.00
	ATOM	5410	CA	GLU	692	48.130	-0.545	16.018	1.00	29.00
	ATOM	5411	CB	GLU	692	49.285	0.426	15.778	1.00	26.55
	ATOM	5412	CG	GLU	692	48.873	1.876	15.651	1.00	29.90
	ATOM	5413	CD	GLU	692	50.040	2.781	15.316	1.00	29.83
35	ATOM	5414	OE1	GLU	692	50.770	3.174	16.247	1.00	32.18
	ATOM	5415	OE2	GLU	692	50.227	3.110	14.124	1.00	31.57

	ATOM	5416	C	GLU	692	48.622	-1.959	15.735	1.00	29.02
	ATOM	5417	O	GLU	692	48.474	-2.467	14.627	1.00	29.22
	ATOM	5418	N	ILE	693	49.258	-2.573	16.724	1.00	29.54
	ATOM	5420	CA	ILE	693	49.766	-3.933	16.555	1.00	31.01
5	ATOM	5421	CB	ILE	693	50.634	-4.360	17.757	1.00	32.36
	ATOM	5422	CG2	ILE	693	51.006	-5.845	17.641	1.00	34.39
	ATOM	5423	CG1	ILE	693	51.909	-3.506	17.815	1.00	30.30
	ATOM	5424	CD1	ILE	693	52.696	-3.693	19.082	1.00	25.66
	ATOM	5425	C	ILE	693	48.638	-4.939	16.381	1.00	30.63
	ATOM	5426	O	ILE	693	48.633	-5.738	15.451	1.00	31.10
	ATOM	5427	N	PHE	694	47.644	-4.858	17.248	1.00	32.60
	ATOM	5429	CA	PHE	694	46.543	-5.793	17.172	1.00	33.86
	ATOM	5430	CB	PHE	694	45.938	-5.970	18.563	1.00	35.66
	ATOM	5431	CG	PHE	694	46.941	-6.499	19.559	1.00	35.70
10	ATOM	5432	CD1	PHE	694	47.460	-5.684	20.556	1.00	37.18
	ATOM	5433	CD2	PHE	694	47.449	-7.794	19.426	1.00	34.37
	ATOM	5434	CE1	PHE	694	48.473	-6.150	21.392	1.00	36.90
	ATOM	5435	CE2	PHE	694	48.456	-8.265	20.255	1.00	31.89
	ATOM	5436	CZ	PHE	694	48.970	-7.446	21.234	1.00	34.95
	ATOM	5437	C	PHE	694	45.532	-5.576	16.049	1.00	34.26
	ATOM	5438	O	PHE	694	44.702	-6.442	15.787	1.00	37.52
	ATOM	5439	N	THR	695	45.636	-4.441	15.359	1.00	32.23
	ATOM	5441	CA	THR	695	44.775	-4.160	14.215	1.00	28.08
15	ATOM	5442	CB	THR	695	44.186	-2.728	14.241	1.00	25.71
	ATOM	5443	OG1	THR	695	45.237	-1.762	14.228	1.00	24.94
	ATOM	5445	CG2	THR	695	43.353	-2.528	15.468	1.00	23.07
	ATOM	5446	C	THR	695	45.615	-4.348	12.955	1.00	27.53
	ATOM	5447	O	THR	695	45.166	-4.066	11.845	1.00	30.89
	ATOM	5448	N	LEU	696	46.833	-4.848	13.145	1.00	27.73
	ATOM	5450	CA	LEU	696	47.781	-5.081	12.061	1.00	28.99
	ATOM	5451	CB	LEU	696	47.370	-6.297	11.226	1.00	27.78
	ATOM	5452	CG	LEU	696	47.379	-7.591	12.047	1.00	29.89
20	ATOM	5453	CD1	LEU	696	47.251	-8.823	11.164	1.00	29.96
	ATOM	5454	CD2	LEU	696	48.668	-7.656	12.803	1.00	30.20
	ATOM	5455	C	LEU	696	48.044	-3.853	11.179	1.00	30.33
	ATOM	5456	O	LEU	696	48.006	-3.926	9.948	1.00	29.41
	ATOM	5457	N	GLY	697	48.374	-2.738	11.831	1.00	30.92
	ATOM	5459	CA	GLY	697	48.655	-1.503	11.113	1.00	30.35
	ATOM	5460	C	GLY	697	47.420	-0.650	10.912	1.00	30.65
	ATOM	5461	O	GLY	697	47.359	0.178	10.000	1.00	30.01
	ATOM	5462	N	GLY	698	46.428	-0.836	11.772	1.00	30.50
25	ATOM	5464	CA	GLY	698	45.209	-0.063	11.656	1.00	30.36
	ATOM	5465	C	GLY	698	45.416	1.415	11.930	1.00	30.07
	ATOM	5466	O	GLY	698	46.320	1.809	12.666	1.00	30.56
	ATOM	5467	N	SER	699	44.554	2.228	11.338	1.00	29.65
	ATOM	5469	CA	SER	699	44.597	3.674	11.485	1.00	28.42
	ATOM	5470	CB	SER	699	44.263	4.324	10.145	1.00	24.61
	ATOM	5471	OG	SER	699	43.960	5.693	10.280	1.00	31.25
	ATOM	5473	C	SER	699	43.621	4.137	12.574	1.00	28.27
	ATOM	5474	O	SER	699	42.406	3.930	12.474	1.00	27.14
30	ATOM	5475	N	PRO	700	44.160	4.682	13.675	1.00	29.29
	ATOM	5476	CD	PRO	700	45.587	4.867	13.999	1.00	26.09
	ATOM	5477	CA	PRO	700	43.303	5.155	14.764	1.00	29.30
	ATOM	5478	CB	PRO	700	44.319	5.624	15.812	1.00	27.68
	ATOM	5479	CG	PRO	700	45.531	5.982	14.985	1.00	27.85
	ATOM	5480	C	PRO	700	42.413	6.305	14.306	1.00	29.71
	ATOM	5481	O	PRO	700	42.800	7.096	13.446	1.00	31.38
	ATOM	5482	N	TYR	701	41.204	6.357	14.854	1.00	29.51
	ATOM	5484	CA	TYR	701	40.246	7.419	14.548	1.00	30.25
35	ATOM	5485	CB	TYR	701	40.559	8.647	15.405	1.00	33.50
	ATOM	5486	CG	TYR	701	40.321	8.413	16.866	1.00	37.84

	ATOM	5487	CD1	TYR	701	41.323	8.638	17.803	1.00	40.05
	ATOM	5488	CE1	TYR	701	41.092	8.412	19.158	1.00	42.28
	ATOM	5489	CD2	TYR	701	39.084	7.965	17.310	1.00	41.54
	ATOM	5490	CE2	TYR	701	38.845	7.738	18.653	1.00	43.70
5	ATOM	5491	CZ	TYR	701	39.845	7.963	19.574	1.00	42.63
	ATOM	5492	OH	TYR	701	39.584	7.716	20.907	1.00	45.31
	ATOM	5494	C	TYR	701	40.173	7.829	13.088	1.00	28.45
	ATOM	5495	O	TYR	701	40.356	9.001	12.760	1.00	29.03
	ATOM	5496	N	PRO	702	39.901	6.867	12.191	1.00	28.05
	ATOM	5497	CD	PRO	702	39.671	5.430	12.417	1.00	26.90
	ATOM	5498	CA	PRO	702	39.815	7.181	10.764	1.00	27.48
	ATOM	5499	CB	PRO	702	39.610	5.807	10.119	1.00	27.06
	ATOM	5500	CG	PRO	702	38.923	5.036	11.169	1.00	28.28
10	ATOM	5501	C	PRO	702	38.689	8.145	10.440	1.00	26.81
	ATOM	5502	O	PRO	702	37.554	7.953	10.865	1.00	26.26
	ATOM	5503	N	GLY	703	39.035	9.192	9.693	1.00	28.48
	ATOM	5505	CA	GLY	703	38.085	10.217	9.295	1.00	26.54
	ATOM	5506	C	GLY	703	37.862	11.285	10.351	1.00	28.03
	ATOM	5507	O	GLY	703	37.110	12.231	10.108	1.00	28.93
	ATOM	5508	N	VAL	704	38.518	11.149	11.505	1.00	28.16
	ATOM	5510	CA	VAL	704	38.369	12.081	12.619	1.00	29.55
	ATOM	5511	CB	VAL	704	38.473	11.360	13.984	1.00	28.50
	ATOM	5512	CG1	VAL	704	38.330	12.350	15.135	1.00	28.07
15	ATOM	5513	CG2	VAL	704	37.403	10.295	14.091	1.00	29.78
	ATOM	5514	C	VAL	704	39.375	13.227	12.588	1.00	32.00
	ATOM	5515	O	VAL	704	40.578	13.028	12.758	1.00	33.85
	ATOM	5516	N	PRO	705	38.888	14.446	12.336	1.00	33.56
	ATOM	5517	CD	PRO	705	37.512	14.763	11.906	1.00	33.69
	ATOM	5518	CA	PRO	705	39.745	15.628	12.280	1.00	32.65
	ATOM	5519	CB	PRO	705	38.863	16.647	11.569	1.00	34.10
	ATOM	5520	CG	PRO	705	37.478	16.256	12.021	1.00	36.38
20	ATOM	5521	C	PRO	705	40.164	16.081	13.668	1.00	33.22
	ATOM	5522	O	PRO	705	39.549	15.708	14.668	1.00	33.26
	ATOM	5523	N	VAL	706	41.198	16.912	13.710	1.00	34.61
	ATOM	5525	CA	VAL	706	41.764	17.417	14.954	1.00	37.72
	ATOM	5526	CB	VAL	706	42.803	18.527	14.673	1.00	39.14
	ATOM	5527	CG1	VAL	706	43.483	18.941	15.957	1.00	39.12
	ATOM	5528	CG2	VAL	706	43.836	18.038	13.670	1.00	41.07
	ATOM	5529	C	VAL	706	40.740	17.934	15.969	1.00	38.70
	ATOM	5530	O	VAL	706	40.761	17.536	17.136	1.00	38.42
25	ATOM	5531	N	GLU	707	39.834	18.796	15.517	1.00	40.43
	ATOM	5533	CA	GLU	707	38.823	19.375	16.395	1.00	40.66
	ATOM	5534	CB	GLU	707	37.973	20.379	15.621	1.00	43.40
	ATOM	5535	C	GLU	707	37.940	18.316	17.028	1.00	41.03
	ATOM	5536	O	GLU	707	37.642	18.370	18.231	1.00	41.52
	ATOM	5537	N	GLU	708	37.560	17.327	16.224	1.00	41.62
	ATOM	5539	CA	GLU	708	36.708	16.243	16.700	1.00	41.06
	ATOM	5540	CB	GLU	708	36.179	15.425	15.523	1.00	45.19
	ATOM	5541	CG	GLU	708	35.281	16.221	14.571	1.00	48.74
	ATOM	5542	CD	GLU	708	34.063	16.825	15.258	1.00	57.18
30	ATOM	5543	OE1	GLU	708	33.523	16.203	16.207	1.00	54.30
	ATOM	5544	OE2	GLU	708	33.646	17.934	14.837	1.00	61.76
	ATOM	5545	C	GLU	708	37.443	15.363	17.694	1.00	38.39
	ATOM	5546	O	GLU	708	36.867	14.927	18.696	1.00	36.76
	ATOM	5547	N	LEU	709	38.725	15.131	17.434	1.00	37.78
	ATOM	5549	CA	LEU	709	39.555	14.327	18.324	1.00	38.13
	ATOM	5550	CB	LEU	709	41.007	14.255	17.820	1.00	35.45
	ATOM	5551	CG	LEU	709	41.984	13.560	18.786	1.00	35.57
	ATOM	5552	CD1	LEU	709	41.825	12.049	18.729	1.00	32.33
35	ATOM	5553	CD2	LEU	709	43.407	13.965	18.484	1.00	31.98
	ATOM	5554	C	LEU	709	39.550	14.946	19.716	1.00	38.31

	ATOM	5555	O	LEU	709	39.362	14.250	20.717	1.00	38.16
	ATOM	5556	N	PHE	710	39.776	16.254	19.770	1.00	40.09
	ATOM	5558	CA	PHE	710	39.807	16.973	21.036	1.00	43.61
	ATOM	5559	CB	PHE	710	39.997	18.475	20.797	1.00	48.22
5	ATOM	5560	CG	PHE	710	41.328	18.834	20.192	1.00	51.77
	ATOM	5561	CD1	PHE	710	42.395	17.939	20.231	1.00	52.94
	ATOM	5562	CD2	PHE	710	41.513	20.072	19.579	1.00	53.99
	ATOM	5563	CE1	PHE	710	43.632	18.275	19.679	1.00	56.48
	ATOM	5564	CE2	PHE	710	42.746	20.422	19.021	1.00	55.72
	ATOM	5565	CZ	PHE	710	43.807	19.517	19.069	1.00	57.84
	ATOM	5566	C	PHE	710	38.519	16.726	21.796	1.00	43.35
	ATOM	5567	O	PHE	710	38.539	16.424	22.989	1.00	43.22
	ATOM	5568	N	LYS	711	37.399	16.804	21.083	1.00	44.68
10	ATOM	5570	CA	LYS	711	36.095	16.587	21.690	1.00	43.47
	ATOM	5571	CB	LYS	711	34.977	16.878	20.687	1.00	44.33
	ATOM	5572	CG	LYS	711	33.601	16.765	21.299	1.00	47.63
	ATOM	5573	CD	LYS	711	32.510	17.206	20.362	1.00	49.97
	ATOM	5574	CE	LYS	711	31.158	16.873	20.960	1.00	51.70
	ATOM	5575	NZ	LYS	711	30.038	17.412	20.150	1.00	57.55
	ATOM	5579	C	LYS	711	35.986	15.173	22.261	1.00	42.72
	ATOM	5580	O	LYS	711	35.589	14.999	23.420	1.00	41.16
	ATOM	5581	N	LEU	712	36.392	14.176	21.471	1.00	42.52
15	ATOM	5583	CA	LEU	712	36.361	12.770	21.898	1.00	42.52
	ATOM	5584	CB	LEU	712	36.922	11.843	20.809	1.00	41.56
	ATOM	5585	CG	LEU	712	36.090	11.528	19.560	1.00	41.87
	ATOM	5586	CD1	LEU	712	36.902	10.620	18.636	1.00	36.28
	ATOM	5587	CD2	LEU	712	34.760	10.868	19.951	1.00	37.19
	ATOM	5588	C	LEU	712	37.158	12.564	23.180	1.00	42.34
	ATOM	5589	O	LEU	712	36.697	11.886	24.107	1.00	40.77
	ATOM	5590	N	LEU	713	38.366	13.121	23.208	1.00	42.68
	ATOM	5592	CA	LEU	713	39.240	13.025	24.371	1.00	44.05
	ATOM	5593	CB	LEU	713	40.581	13.710	24.100	1.00	45.45
20	ATOM	5594	CG	LEU	713	41.418	13.114	22.963	1.00	44.78
	ATOM	5595	CD1	LEU	713	42.676	13.945	22.750	1.00	41.89
	ATOM	5596	CD2	LEU	713	41.757	11.660	23.282	1.00	43.21
	ATOM	5597	C	LEU	713	38.571	13.654	25.591	1.00	44.66
	ATOM	5598	O	LEU	713	38.562	13.051	26.662	1.00	45.70
	ATOM	5599	N	LYS	714	37.980	14.839	25.418	1.00	43.05
	ATOM	5601	CA	LYS	714	37.300	15.510	26.524	1.00	42.19
	ATOM	5602	CB	LYS	714	36.884	16.921	26.127	1.00	42.41
	ATOM	5603	CG	LYS	714	38.076	17.828	25.918	1.00	46.10
25	ATOM	5604	CD	LYS	714	37.684	19.259	25.589	1.00	49.86
	ATOM	5605	CE	LYS	714	38.939	20.097	25.292	1.00	52.55
	ATOM	5606	NZ	LYS	714	39.889	20.148	26.459	1.00	50.17
	ATOM	5610	C	LYS	714	36.104	14.728	27.054	1.00	42.39
	ATOM	5611	O	LYS	714	35.767	14.824	28.237	1.00	43.44
	ATOM	5612	N	GLU	715	35.480	13.934	26.192	1.00	40.44
	ATOM	5614	CA	GLU	715	34.342	13.118	26.593	1.00	37.90
	ATOM	5615	CB	GLU	715	33.408	12.893	25.411	1.00	39.54
	ATOM	5616	CG	GLU	715	32.800	14.174	24.846	1.00	45.20
30	ATOM	5617	CD	GLU	715	32.032	13.936	23.563	1.00	47.85
	ATOM	5618	OE1	GLU	715	32.409	13.008	22.810	1.00	50.00
	ATOM	5619	OE2	GLU	715	31.061	14.677	23.304	1.00	50.41
	ATOM	5620	C	GLU	715	34.793	11.773	27.157	1.00	37.31
	ATOM	5621	O	GLU	715	33.970	10.907	27.450	1.00	36.79
	ATOM	5622	N	GLY	716	36.102	11.585	27.286	1.00	36.60
	ATOM	5624	CA	GLY	716	36.623	10.336	27.819	1.00	37.11
	ATOM	5625	C	GLY	716	36.503	9.140	26.887	1.00	38.30
	ATOM	5626	O	GLY	716	36.603	7.994	27.340	1.00	36.84
35	ATOM	5627	N	HIS	717	36.307	9.404	25.592	1.00	40.24
	ATOM	5629	CA	HIS	717	36.167	8.353	24.579	1.00	42.63

	ATOM	5630	CB	HIS	717	35.800	8.951	23.217	1.00	43.11
	ATOM	5631	CG	HIS	717	35.745	7.941	22.112	1.00	44.69
	ATOM	5632	CD2	HIS	717	34.756	7.101	21.717	1.00	45.13
	ATOM	5633	ND1	HIS	717	36.818	7.683	21.283	1.00	47.31
	ATOM	5635	CE1	HIS	717	36.494	6.728	20.426	1.00	47.61
5	ATOM	5636	NE2	HIS	717	35.250	6.357	20.670	1.00	44.95
	ATOM	5638	C	HIS	717	37.451	7.567	24.413	1.00	44.84
	ATOM	5639	O	HIS	717	38.528	8.152	24.295	1.00	46.79
	ATOM	5640	N	ARG	718	37.313	6.247	24.337	1.00	45.44
	ATOM	5642	CA	ARG	718	38.440	5.345	24.170	1.00	45.36
	ATOM	5643	CB	ARG	718	38.614	4.496	25.434	1.00	43.82
	ATOM	5644	CG	ARG	718	38.976	5.308	26.687	1.00	44.52
	ATOM	5645	CD	ARG	718	40.284	6.065	26.476	1.00	45.02
	ATOM	5646	NE	ARG	718	40.718	6.856	27.630	1.00	43.12
10	ATOM	5648	CZ	ARG	718	40.550	8.173	27.744	1.00	44.77
	ATOM	5649	NH1	ARG	718	39.940	8.859	26.784	1.00	44.67
	ATOM	5652	NH2	ARG	718	41.067	8.826	28.777	1.00	46.39
	ATOM	5655	C	ARG	718	38.124	4.474	22.952	1.00	45.94
	ATOM	5656	O	ARG	718	36.953	4.243	22.645	1.00	47.59
	ATOM	5657	N	MET	719	39.145	4.077	22.204	1.00	45.34
	ATOM	5659	CA	MET	719	38.925	3.253	21.029	1.00	44.28
	ATOM	5660	CB	MET	719	40.198	3.125	20.185	1.00	42.30
	ATOM	5661	CG	MET	719	40.575	4.399	19.441	1.00	38.44
15	ATOM	5662	SD	MET	719	42.000	4.225	18.368	1.00	36.97
	ATOM	5663	CE	MET	719	43.317	4.219	19.511	1.00	36.09
	ATOM	5664	C	MET	719	38.415	1.877	21.418	1.00	46.21
	ATOM	5665	O	MET	719	38.708	1.393	22.517	1.00	43.29
	ATOM	5666	N	ASP	720	37.659	1.267	20.498	1.00	48.79
	ATOM	5668	CA	ASP	720	37.069	-0.063	20.666	1.00	48.87
	ATOM	5669	CB	ASP	720	36.099	-0.369	19.513	1.00	54.01
	ATOM	5670	CG	ASP	720	34.766	0.374	19.632	1.00	59.30
	ATOM	5671	OD1	ASP	720	34.762	1.583	19.981	1.00	62.96
20	ATOM	5672	OD2	ASP	720	33.716	-0.259	19.354	1.00	58.64
	ATOM	5673	C	ASP	720	38.126	-1.154	20.688	1.00	46.10
	ATOM	5674	O	ASP	720	39.213	-0.992	20.125	1.00	44.13
	ATOM	5675	N	LYS	721	37.788	-2.272	21.322	1.00	45.27
	ATOM	5677	CA	LYS	721	38.689	-3.413	21.404	1.00	43.25
	ATOM	5678	CB	LYS	721	38.172	-4.436	22.416	1.00	42.02
	ATOM	5679	CG	LYS	721	39.072	-5.651	22.557	1.00	46.57
	ATOM	5680	CD	LYS	721	38.602	-6.576	23.666	1.00	49.96
	ATOM	5681	CE	LYS	721	38.300	-7.971	23.141	1.00	51.80
25	ATOM	5682	NZ	LYS	721	37.937	-8.920	24.240	1.00	56.08
	ATOM	5686	C	LYS	721	38.769	-4.055	20.031	1.00	43.67
	ATOM	5687	O	LYS	721	37.736	-4.313	19.394	1.00	44.02
	ATOM	5688	N	PRO	722	39.995	-4.233	19.513	1.00	43.94
	ATOM	5689	CD	PRO	722	41.281	-3.711	20.001	1.00	45.90
	ATOM	5690	CA	PRO	722	40.159	-4.853	18.198	1.00	43.96
	ATOM	5691	CB	PRO	722	41.665	-4.720	17.941	1.00	43.11
	ATOM	5692	CG	PRO	722	42.046	-3.509	18.715	1.00	45.16
	ATOM	5693	C	PRO	722	39.772	-6.317	18.295	1.00	43.09
30	ATOM	5694	O	PRO	722	39.764	-6.888	19.385	1.00	41.32
	ATOM	5695	N	SER	723	39.382	-6.902	17.170	1.00	45.79
	ATOM	5697	CA	SER	723	39.044	-8.316	17.144	1.00	46.67
	ATOM	5698	CB	SER	723	38.303	-8.664	15.857	1.00	44.69
	ATOM	5699	OG	SER	723	39.131	-8.414	14.736	1.00	49.79
	ATOM	5701	C	SER	723	40.422	-8.961	17.148	1.00	46.90
	ATOM	5702	O	SER	723	41.360	-8.411	16.581	1.00	48.81
	ATOM	5703	N	ASN	724	40.540	-10.131	17.760	1.00	49.28
	ATOM	5705	CA	ASN	724	41.826	-10.804	17.849	1.00	52.10
35	ATOM	5706	CB	ASN	724	42.480	-10.947	16.469	1.00	55.86
	ATOM	5707	CG	ASN	724	41.774	-11.957	15.592	1.00	58.72

	ATOM	5708	OD1	ASN	724	41.686	-13.140	15.941	1.00	62.28
	ATOM	5709	ND2	ASN	724	41.258	-11.503	14.449	1.00	59.56
	ATOM	5712	C	ASN	724	42.665	-9.931	18.770	1.00	51.97
	ATOM	5713	O	ASN	724	43.621	-9.274	18.369	1.00	53.85
5	ATOM	5714	N	CYS	725	42.202	-9.859	20.004	1.00	51.02
	ATOM	5716	CA	CYS	725	42.853	-9.094	21.049	1.00	50.18
	ATOM	5717	CB	CYS	725	42.708	-7.583	20.811	1.00	47.75
	ATOM	5718	SG	CYS	725	43.424	-6.577	22.130	1.00	44.37
	ATOM	5719	C	CYS	725	42.131	-9.507	22.315	1.00	49.31
	ATOM	5720	O	CYS	725	40.916	-9.371	22.417	1.00	49.90
	ATOM	5721	N	THR	726	42.866	-10.088	23.249	1.00	48.52
	ATOM	5723	CA	THR	726	42.262	-10.541	24.490	1.00	49.58
	ATOM	5724	CB	THR	726	43.251	-11.444	25.291	1.00	49.84
10	ATOM	5725	OG1	THR	726	44.236	-10.648	25.976	1.00	49.05
	ATOM	5727	CG2	THR	726	43.982	-12.363	24.352	1.00	47.96
	ATOM	5728	C	THR	726	41.788	-9.369	25.356	1.00	49.93
	ATOM	5729	O	THR	726	42.305	-8.256	25.244	1.00	51.55
	ATOM	5730	N	ASN	727	40.829	-9.622	26.242	1.00	50.48
	ATOM	5732	CA	ASN	727	40.335	-8.577	27.144	1.00	52.17
	ATOM	5733	CB	ASN	727	39.190	-9.099	28.016	1.00	57.57
	ATOM	5734	CG	ASN	727	39.533	-10.409	28.714	1.00	66.49
	ATOM	5735	OD1	ASN	727	40.709	-10.786	28.833	1.00	70.43
	ATOM	5736	ND2	ASN	727	38.500	-11.122	29.175	1.00	68.43
15	ATOM	5739	C	ASN	727	41.491	-8.091	28.023	1.00	50.29
	ATOM	5740	O	ASN	727	41.467	-6.976	28.540	1.00	49.88
	ATOM	5741	N	GLU	728	42.518	-8.927	28.163	1.00	50.60
	ATOM	5743	CA	GLU	728	43.700	-8.597	28.956	1.00	49.33
	ATOM	5744	CB	GLU	728	44.529	-9.859	29.220	1.00	50.44
	ATOM	5745	CG	GLU	728	45.802	-9.600	30.008	1.00	55.30
	ATOM	5746	CD	GLU	728	46.577	-10.862	30.354	1.00	57.40
	ATOM	5747	OE1	GLU	728	46.716	-11.754	29.489	1.00	56.75
	ATOM	5748	OE2	GLU	728	47.062	-10.950	31.502	1.00	59.85
20	ATOM	5749	C	GLU	728	44.539	-7.552	28.212	1.00	47.08
	ATOM	5750	O	GLU	728	44.888	-6.512	28.776	1.00	48.02
	ATOM	5751	N	LEU	729	44.846	-7.821	26.945	1.00	43.34
	ATOM	5753	CA	LEU	729	45.630	-6.891	26.129	1.00	42.01
	ATOM	5754	CB	LEU	729	45.899	-7.500	24.751	1.00	39.46
	ATOM	5755	CG	LEU	729	46.911	-8.639	24.772	1.00	40.31
	ATOM	5756	CD1	LEU	729	46.782	-9.482	23.531	1.00	42.21
	ATOM	5757	CD2	LEU	729	48.314	-8.068	24.900	1.00	42.49
	ATOM	5758	C	LEU	729	44.901	-5.557	25.980	1.00	40.61
25	ATOM	5759	O	LEU	729	45.510	-4.481	25.953	1.00	38.33
	ATOM	5760	N	TYR	730	43.580	-5.637	25.909	1.00	39.07
	ATOM	5762	CA	TYR	730	42.761	-4.455	25.773	1.00	38.61
	ATOM	5763	CB	TYR	730	41.341	-4.837	25.369	1.00	36.79
	ATOM	5764	CG	TYR	730	40.454	-3.646	25.125	1.00	37.08
	ATOM	5765	CD1	TYR	730	40.760	-2.721	24.127	1.00	32.86
	ATOM	5766	CE1	TYR	730	39.961	-1.616	23.912	1.00	29.79
	ATOM	5767	CD2	TYR	730	39.328	-3.420	25.916	1.00	36.99
	ATOM	5768	CE2	TYR	730	38.522	-2.312	25.704	1.00	36.69
30	ATOM	5769	CZ	TYR	730	38.853	-1.412	24.706	1.00	32.69
	ATOM	5770	OH	TYR	730	38.044	-0.320	24.492	1.00	38.80
	ATOM	5772	C	TYR	730	42.767	-3.662	27.080	1.00	39.75
	ATOM	5773	O	TYR	730	42.781	-2.430	27.065	1.00	40.53
	ATOM	5774	N	MET	731	42.738	-4.360	28.210	1.00	41.88
	ATOM	5776	CA	MET	731	42.778	-3.684	29.509	1.00	45.34
	ATOM	5777	CB	MET	731	42.658	-4.697	30.646	1.00	53.46
	ATOM	5778	CG	MET	731	41.253	-5.248	30.836	1.00	64.30
	ATOM	5779	SD	MET	731	40.134	-4.095	31.653	1.00	75.78
35	ATOM	5780	CE	MET	731	40.657	-4.338	33.370	1.00	69.70
	ATOM	5781	C	MET	731	44.099	-2.927	29.614	1.00	41.53

	ATOM	5782	O	MET	731	44.157	-1.814	30.138	1.00	37.91
	ATOM	5783	N	MET	732	45.156	-3.545	29.098	1.00	40.48
	ATOM	5785	CA	MET	732	46.478	-2.937	29.091	1.00	40.23
	ATOM	5786	CB	MET	732	47.508	-3.872	28.436	1.00	40.29
	ATOM	5787	CG	MET	732	48.929	-3.307	28.390	1.00	38.07
5	ATOM	5788	SD	MET	732	50.171	-4.522	27.908	1.00	37.65
	ATOM	5789	CE	MET	732	50.407	-5.343	29.431	1.00	37.90
	ATOM	5790	C	MET	732	46.378	-1.623	28.317	1.00	38.96
	ATOM	5791	O	MET	732	46.843	-0.591	28.790	1.00	41.36
	ATOM	5792	N	MET	733	45.744	-1.663	27.148	1.00	36.94
	ATOM	5794	CA	MET	733	45.574	-0.463	26.340	1.00	35.19
	ATOM	5795	CB	MET	733	44.796	-0.769	25.070	1.00	36.07
	ATOM	5796	CG	MET	733	45.549	-1.577	24.048	1.00	35.99
	ATOM	5797	SD	MET	733	44.471	-1.851	22.641	1.00	40.05
10	ATOM	5798	CE	MET	733	45.244	-3.351	21.909	1.00	33.13
	ATOM	5799	C	MET	733	44.800	0.560	27.141	1.00	37.29
	ATOM	5800	O	MET	733	45.207	1.719	27.245	1.00	39.14
	ATOM	5801	N	ARG	734	43.690	0.125	27.735	1.00	38.76
	ATOM	5803	CA	ARG	734	42.849	1.014	28.532	1.00	39.49
	ATOM	5804	CB	ARG	734	41.577	0.297	28.993	1.00	40.33
	ATOM	5805	CG	ARG	734	40.699	-0.225	27.856	1.00	38.02
	ATOM	5806	CD	ARG	734	40.256	0.877	26.909	1.00	42.72
	ATOM	5807	NE	ARG	734	39.443	1.898	27.567	1.00	48.85
15	ATOM	5809	CZ	ARG	734	38.120	1.838	27.700	1.00	52.35
	ATOM	5810	NH1	ARG	734	37.435	0.811	27.222	1.00	54.79
	ATOM	5813	NH2	ARG	734	37.477	2.804	28.338	1.00	54.69
	ATOM	5816	C	ARG	734	43.627	1.587	29.715	1.00	38.70
	ATOM	5817	O	ARG	734	43.445	2.757	30.068	1.00	40.92
	ATOM	5818	N	ASP	735	44.530	0.782	30.276	1.00	38.76
	ATOM	5820	CA	ASP	735	45.379	1.208	31.399	1.00	38.60
	ATOM	5821	CB	ASP	735	46.325	0.087	31.825	1.00	41.34
	ATOM	5822	CG	ASP	735	45.622	-1.022	32.574	1.00	44.66
20	ATOM	5823	OD1	ASP	735	46.048	-2.194	32.428	1.00	43.15
	ATOM	5824	OD2	ASP	735	44.657	-0.713	33.313	1.00	44.46
	ATOM	5825	C	ASP	735	46.215	2.385	30.938	1.00	37.76
	ATOM	5826	O	ASP	735	46.235	3.446	31.585	1.00	36.35
	ATOM	5827	N	CYS	736	46.890	2.182	29.805	1.00	35.39
	ATOM	5829	CA	CYS	736	47.730	3.196	29.181	1.00	34.77
	ATOM	5830	CB	CYS	736	48.379	2.652	27.916	1.00	30.62
	ATOM	5831	SG	CYS	736	49.453	1.261	28.198	1.00	30.96
	ATOM	5832	C	CYS	736	46.938	4.429	28.814	1.00	35.98
25	ATOM	5833	O	CYS	736	47.516	5.491	28.606	1.00	37.38
	ATOM	5834	N	TRP	737	45.620	4.290	28.713	1.00	38.50
	ATOM	5836	CA	TRP	737	44.772	5.423	28.370	1.00	40.16
	ATOM	5837	CB	TRP	737	43.791	5.028	27.271	1.00	38.41
	ATOM	5838	CG	TRP	737	44.453	4.586	26.011	1.00	39.33
	ATOM	5839	CD2	TRP	737	43.893	3.718	25.020	1.00	39.64
	ATOM	5840	CE2	TRP	737	44.852	3.583	23.992	1.00	39.97
	ATOM	5841	CE3	TRP	737	42.672	3.040	24.900	1.00	37.06
	ATOM	5842	CD1	TRP	737	45.695	4.932	25.556	1.00	39.56
30	ATOM	5843	NE1	TRP	737	45.941	4.336	24.343	1.00	38.61
	ATOM	5845	CZ2	TRP	737	44.627	2.795	22.859	1.00	38.78
	ATOM	5846	CZ3	TRP	737	42.452	2.261	23.778	1.00	38.90
	ATOM	5847	CH2	TRP	737	43.426	2.145	22.772	1.00	38.18
	ATOM	5848	C	TRP	737	44.028	6.029	29.563	1.00	41.30
	ATOM	5849	O	TRP	737	42.979	6.658	29.398	1.00	41.45
	ATOM	5850	N	HIS	738	44.575	5.873	30.763	1.00	43.01
	ATOM	5852	CA	HIS	738	43.932	6.423	31.948	1.00	44.64
	ATOM	5853	CB	HIS	738	44.454	5.735	33.205	1.00	46.20
35	ATOM	5854	CG	HIS	738	43.742	6.154	34.458	1.00	50.35
	ATOM	5855	CD2	HIS	738	43.473	7.379	34.963	1.00	49.09

	ATOM	5856	ND1	HIS	738	43.220	5.244	35.355	1.00	49.94
	ATOM	5858	CE1	HIS	738	42.659	5.899	36.357	1.00	52.92
	ATOM	5859	NE2	HIS	738	42.798	7.194	36.146	1.00	46.91
	ATOM	5861	C	HIS	738	44.174	7.921	32.037	1.00	45.26
5	ATOM	5862	O	HIS	738	45.314	8.356	32.021	1.00	45.31
	ATOM	5863	N	ALA	739	43.099	8.686	32.224	1.00	46.61
	ATOM	5865	CA	ALA	739	43.155	10.150	32.322	1.00	48.49
	ATOM	5866	CB	ALA	739	41.823	10.681	32.790	1.00	49.69
	ATOM	5867	C	ALA	739	44.272	10.682	33.224	1.00	50.77
	ATOM	5868	O	ALA	739	45.004	11.601	32.846	1.00	51.77
	ATOM	5869	N	VAL	740	44.336	10.138	34.439	1.00	51.47
	ATOM	5871	CA	VAL	740	45.352	10.485	35.439	1.00	51.09
	ATOM	5872	CB	VAL	740	44.897	10.075	36.850	1.00	52.40
10	ATOM	5873	CG1	VAL	740	45.847	10.624	37.878	1.00	53.38
	ATOM	5874	CG2	VAL	740	43.485	10.544	37.105	1.00	55.18
	ATOM	5875	C	VAL	740	46.649	9.727	35.130	1.00	48.99
	ATOM	5876	O	VAL	740	46.773	8.534	35.440	1.00	47.72
	ATOM	5877	N	PRO	741	47.646	10.421	34.565	1.00	48.31
	ATOM	5878	CD	PRO	741	47.603	11.861	34.253	1.00	47.84
	ATOM	5879	CA	PRO	741	48.949	9.852	34.197	1.00	48.51
	ATOM	5880	CB	PRO	741	49.762	11.087	33.828	1.00	46.83
	ATOM	5881	CG	PRO	741	48.714	12.000	33.255	1.00	46.21
	ATOM	5882	C	PRO	741	49.641	9.016	35.275	1.00	49.12
15	ATOM	5883	O	PRO	741	50.449	8.139	34.955	1.00	46.57
	ATOM	5884	N	SER	742	49.327	9.290	36.541	1.00	49.47
	ATOM	5886	CA	SER	742	49.928	8.557	37.651	1.00	49.50
	ATOM	5887	CB	SER	742	49.760	9.326	38.963	1.00	51.06
	ATOM	5888	OG	SER	742	48.403	9.638	39.209	1.00	53.81
	ATOM	5890	C	SER	742	49.339	7.159	37.787	1.00	48.81
	ATOM	5891	O	SER	742	49.926	6.284	38.427	1.00	49.45
	ATOM	5892	N	GLN	743	48.164	6.959	37.203	1.00	47.82
	ATOM	5894	CA	GLN	743	47.529	5.658	37.273	1.00	46.34
20	ATOM	5895	CB	GLN	743	46.022	5.791	37.432	1.00	49.74
	ATOM	5896	CG	GLN	743	45.519	5.305	38.784	1.00	55.41
	ATOM	5897	CD	GLN	743	46.178	6.030	39.947	1.00	59.15
	ATOM	5898	OE1	GLN	743	46.905	5.425	40.748	1.00	59.02
	ATOM	5899	NE2	GLN	743	45.922	7.338	40.052	1.00	60.03
	ATOM	5902	C	GLN	743	47.874	4.768	36.095	1.00	44.34
	ATOM	5903	O	GLN	743	47.548	3.578	36.114	1.00	44.64
	ATOM	5904	N	ARG	744	48.497	5.339	35.059	1.00	42.83
	ATOM	5906	CA	ARG	744	48.914	4.559	33.880	1.00	40.34
25	ATOM	5907	CB	ARG	744	49.349	5.469	32.724	1.00	35.84
	ATOM	5908	CG	ARG	744	48.296	6.406	32.190	1.00	28.25
	ATOM	5909	CD	ARG	744	48.906	7.383	31.216	1.00	22.56
	ATOM	5910	NE	ARG	744	47.948	8.437	30.922	1.00	28.09
	ATOM	5912	CZ	ARG	744	48.258	9.658	30.493	1.00	32.83
	ATOM	5913	NH1	ARG	744	49.524	10.001	30.278	1.00	34.44
	ATOM	5916	NH2	ARG	744	47.307	10.569	30.360	1.00	32.00
	ATOM	5919	C	ARG	744	50.110	3.712	34.295	1.00	41.58
	ATOM	5920	O	ARG	744	50.906	4.124	35.145	1.00	45.48
30	ATOM	5921	N	PRO	745	50.223	2.489	33.754	1.00	40.97
	ATOM	5922	CD	PRO	745	49.345	1.749	32.831	1.00	39.90
	ATOM	5923	CA	PRO	745	51.381	1.685	34.157	1.00	39.77
	ATOM	5924	CB	PRO	745	51.063	0.311	33.558	1.00	39.31
	ATOM	5925	CG	PRO	745	50.255	0.642	32.344	1.00	40.98
	ATOM	5926	C	PRO	745	52.664	2.269	33.573	1.00	38.44
	ATOM	5927	O	PRO	745	52.631	3.009	32.595	1.00	39.64
	ATOM	5928	N	THR	746	53.783	2.001	34.224	1.00	37.50
	ATOM	5930	CA	THR	746	55.066	2.462	33.728	1.00	37.56
35	ATOM	5931	CB	THR	746	56.108	2.571	34.869	1.00	38.58
	ATOM	5932	OG1	THR	746	56.286	1.285	35.487	1.00	43.28

	ATOM	5934	CG2	THR	746	55.666	3.567	35.899	1.00	34.64
	ATOM	5935	C	THR	746	55.546	1.393	32.739	1.00	36.49
	ATOM	5936	O	THR	746	55.118	0.234	32.817	1.00	34.18
	ATOM	5937	N	PHE	747	56.453	1.768	31.839	1.00	35.27
5	ATOM	5939	CA	PHE	747	56.995	0.814	30.880	1.00	33.48
	ATOM	5940	CB	PHE	747	58.025	1.475	29.970	1.00	34.35
	ATOM	5941	CG	PHE	747	57.419	2.369	28.920	1.00	32.49
	ATOM	5942	CD1	PHE	747	56.715	1.825	27.856	1.00	30.69
	ATOM	5943	CD2	PHE	747	57.519	3.749	29.018	1.00	32.81
	ATOM	5944	CE1	PHE	747	56.122	2.639	26.907	1.00	29.41
	ATOM	5945	CE2	PHE	747	56.926	4.573	28.072	1.00	32.93
	ATOM	5946	CZ	PHE	747	56.223	4.014	27.015	1.00	31.50
	ATOM	5947	C	PHE	747	57.621	-0.363	31.606	1.00	34.65
	ATOM	5948	O	PHE	747	57.616	-1.474	31.099	1.00	36.34
10	ATOM	5949	N	LYS	748	58.142	-0.128	32.808	1.00	37.75
	ATOM	5951	CA	LYS	748	58.748	-1.205	33.583	1.00	39.67
	ATOM	5952	CB	LYS	748	59.382	-0.664	34.873	1.00	43.06
	ATOM	5953	CG	LYS	748	59.958	-1.757	35.774	1.00	48.96
	ATOM	5954	CD	LYS	748	60.750	-1.207	36.966	1.00	52.20
	ATOM	5955	CE	LYS	748	61.183	-2.344	37.907	1.00	53.62
	ATOM	5956	NZ	LYS	748	62.057	-1.893	39.031	1.00	54.82
	ATOM	5960	C	LYS	748	57.680	-2.263	33.882	1.00	39.65
	ATOM	5961	O	LYS	748	57.902	-3.454	33.652	1.00	38.91
15	ATOM	5962	N	GLN	749	56.503	-1.818	34.331	1.00	39.39
	ATOM	5964	CA	GLN	749	55.402	-2.742	34.623	1.00	40.70
	ATOM	5965	CB	GLN	749	54.177	-1.991	35.140	1.00	43.82
	ATOM	5966	CG	GLN	749	54.395	-1.149	36.373	1.00	50.97
	ATOM	5967	CD	GLN	749	53.175	-0.304	36.715	1.00	55.53
	ATOM	5968	OE1	GLN	749	53.272	0.914	36.895	1.00	55.80
	ATOM	5969	NE2	GLN	749	52.012	-0.940	36.773	1.00	60.05
	ATOM	5972	C	GLN	749	55.009	-3.455	33.334	1.00	40.03
	ATOM	5973	O	GLN	749	54.903	-4.679	33.298	1.00	40.26
20	ATOM	5974	N	LEU	750	54.802	-2.666	32.278	1.00	39.18
	ATOM	5976	CA	LEU	750	54.400	-3.171	30.964	1.00	36.65
	ATOM	5977	CB	LEU	750	54.369	-2.039	29.927	1.00	34.58
	ATOM	5978	CG	LEU	750	53.355	-0.910	30.116	1.00	32.52
	ATOM	5979	CD1	LEU	750	53.644	0.210	29.125	1.00	31.67
	ATOM	5980	CD2	LEU	750	51.947	-1.435	29.935	1.00	31.37
	ATOM	5981	C	LEU	750	55.321	-4.255	30.477	1.00	35.81
	ATOM	5982	O	LEU	750	54.856	-5.267	29.963	1.00	35.81
	ATOM	5983	N	VAL	751	56.626	-4.035	30.620	1.00	37.38
25	ATOM	5985	CA	VAL	751	57.607	-5.029	30.193	1.00	38.66
	ATOM	5986	CB	VAL	751	59.077	-4.545	30.411	1.00	35.42
	ATOM	5987	CG1	VAL	751	60.075	-5.646	30.041	1.00	29.83
	ATOM	5988	CG2	VAL	751	59.342	-3.324	29.559	1.00	29.95
	ATOM	5989	C	VAL	751	57.337	-6.314	30.974	1.00	41.63
	ATOM	5990	O	VAL	751	57.312	-7.401	30.396	1.00	42.43
	ATOM	5991	N	GLU	752	57.051	-6.174	32.267	1.00	43.35
	ATOM	5993	CA	GLU	752	56.766	-7.329	33.111	1.00	47.39
	ATOM	5994	CB	GLU	752	56.674	-6.914	34.587	1.00	50.66
30	ATOM	5995	CG	GLU	752	57.950	-6.243	35.101	1.00	54.77
	ATOM	5996	CD	GLU	752	58.006	-6.101	36.612	1.00	55.14
	ATOM	5997	OE1	GLU	752	58.246	-4.972	37.102	1.00	54.14
	ATOM	5998	OE2	GLU	752	57.844	-7.131	37.308	1.00	57.73
	ATOM	5999	C	GLU	752	55.496	-8.068	32.655	1.00	46.00
	ATOM	6000	O	GLU	752	55.548	-9.261	32.328	1.00	46.25
	ATOM	6001	N	ASP	753	54.380	-7.346	32.601	1.00	44.35
	ATOM	6003	CA	ASP	753	53.099	-7.912	32.180	1.00	44.19
	ATOM	6004	CB	ASP	753	52.059	-6.814	31.985	1.00	46.22
35	ATOM	6005	CG	ASP	753	51.512	-6.279	33.278	1.00	50.48
	ATOM	6006	OD1	ASP	753	51.396	-7.062	34.248	1.00	52.15

	ATOM	6007	OD2	ASP	753	51.170	-5.069	33.306	1.00	52.20
	ATOM	6008	C	ASP	753	53.244	-8.608	30.849	1.00	44.54
	ATOM	6009	O	ASP	753	52.770	-9.724	30.674	1.00	46.03
	ATOM	6010	N	LEU	754	53.880	-7.918	29.906	1.00	44.43
5	ATOM	6012	CA	LEU	754	54.079	-8.438	28.563	1.00	43.70
	ATOM	6013	CB	LEU	754	54.570	-7.339	27.618	1.00	43.48
	ATOM	6014	CG	LEU	754	53.481	-6.350	27.201	1.00	44.67
	ATOM	6015	CD1	LEU	754	54.095	-5.218	26.399	1.00	44.51
	ATOM	6016	CD2	LEU	754	52.384	-7.069	26.408	1.00	42.07
	ATOM	6017	C	LEU	754	54.993	-9.642	28.512	1.00	43.14
	ATOM	6018	O	LEU	754	54.795	-10.536	27.697	1.00	41.32
	ATOM	6019	N	ASP	755	55.990	-9.671	29.383	1.00	44.74
	ATOM	6021	CA	ASP	755	56.897	-10.800	29.426	1.00	47.24
10	ATOM	6022	CB	ASP	755	57.942	-10.575	30.517	1.00	51.26
	ATOM	6023	CG	ASP	755	59.121	-11.518	30.407	1.00	55.39
	ATOM	6024	OD1	ASP	755	59.739	-11.793	31.455	1.00	60.61
	ATOM	6025	OD2	ASP	755	59.443	-11.970	29.283	1.00	57.16
	ATOM	6026	C	ASP	755	56.023	-12.005	29.771	1.00	47.67
	ATOM	6027	O	ASP	755	56.041	-13.032	29.081	1.00	45.99
	ATOM	6028	N	ARG	756	55.186	-11.816	30.789	1.00	46.72
	ATOM	6030	CA	ARG	756	54.272	-12.851	31.256	1.00	46.25
	ATOM	6031	CB	ARG	756	53.519	-12.368	32.499	1.00	46.31
	ATOM	6032	CG	ARG	756	52.391	-13.287	32.953	1.00	46.99
15	ATOM	6033	CD	ARG	756	51.733	-12.776	34.227	1.00	48.10
	ATOM	6034	NE	ARG	756	51.320	-11.379	34.118	1.00	53.67
	ATOM	6036	CZ	ARG	756	50.294	-10.951	33.385	1.00	55.35
	ATOM	6037	NH1	ARG	756	49.562	-11.812	32.684	1.00	54.10
	ATOM	6040	NH2	ARG	756	50.008	-9.654	33.344	1.00	56.02
	ATOM	6043	C	ARG	756	53.282	-13.261	30.175	1.00	45.05
	ATOM	6044	O	ARG	756	53.213	-14.429	29.806	1.00	47.19
	ATOM	6045	N	ILE	757	52.550	-12.289	29.647	1.00	43.47
20	ATOM	6047	CA	ILE	757	51.552	-12.553	28.617	1.00	43.80
	ATOM	6048	CB	ILE	757	50.842	-11.241	28.161	1.00	42.02
	ATOM	6049	CG2	ILE	757	49.811	-11.536	27.086	1.00	39.63
	ATOM	6050	CG1	ILE	757	50.154	-10.578	29.361	1.00	40.00
	ATOM	6051	CD1	ILE	757	49.600	-9.212	29.086	1.00	42.68
	ATOM	6052	C	ILE	757	52.148	-13.296	27.428	1.00	46.03
	ATOM	6053	O	ILE	757	51.549	-14.250	26.947	1.00	47.78
	ATOM	6054	N	VAL	758	53.359	-12.925	27.015	1.00	49.03
	ATOM	6056	CA	VAL	758	54.015	-13.584	25.884	1.00	51.51
	ATOM	6057	CB	VAL	758	55.412	-12.971	25.556	1.00	50.75
25	ATOM	6058	CG1	VAL	758	56.105	-13.780	24.470	1.00	50.31
	ATOM	6059	CG2	VAL	758	55.269	-11.541	25.081	1.00	52.52
	ATOM	6060	C	VAL	758	54.209	-15.050	26.212	1.00	54.30
	ATOM	6061	O	VAL	758	53.991	-15.915	25.369	1.00	54.80
	ATOM	6062	N	ALA	759	54.617	-15.311	27.450	1.00	57.65
	ATOM	6064	CA	ALA	759	54.858	-16.667	27.919	1.00	60.62
	ATOM	6065	CB	ALA	759	55.423	-16.637	29.327	1.00	60.32
	ATOM	6066	C	ALA	759	53.571	-17.478	27.889	1.00	63.25
	ATOM	6067	O	ALA	759	53.568	-18.638	27.478	1.00	65.81
30	ATOM	6068	N	LEU	760	52.475	-16.856	28.305	1.00	63.56
	ATOM	6070	CA	LEU	760	51.191	-17.533	28.333	1.00	64.25
	ATOM	6071	CB	LEU	760	50.302	-16.912	29.407	1.00	65.66
	ATOM	6072	CG	LEU	760	50.894	-16.962	30.820	1.00	65.62
	ATOM	6073	CD1	LEU	760	49.988	-16.246	31.809	1.00	64.75
	ATOM	6074	CD2	LEU	760	51.109	-18.410	31.227	1.00	66.65
	ATOM	6075	C	LEU	760	50.483	-17.535	26.984	1.00	64.89
	ATOM	6076	O	LEU	760	49.390	-18.088	26.860	1.00	66.37
	ATOM	6077	N	THR	761	51.103	-16.933	25.973	1.00	65.24
35	ATOM	6079	CA	THR	761	50.516	-16.882	24.634	1.00	64.44
	ATOM	6080	CB	THR	761	50.829	-15.539	23.925	1.00	62.95

	ATOM	6081	OG1	THR	761	50.247	-14.463	24.669	1.00	62.70	
	ATOM	6083	CG2	THR	761	50.249	-15.525	22.521	1.00	60.59	
	ATOM	6084	C	THR	761	51.003	-18.044	23.769	1.00	64.71	
	ATOM	6085	O	THR	761	52.202	-18.201	23.533	1.00	64.70	
	ATOM	6086	SG	CYS	1603	18.536	-8.818	20.295	0.50	33.97	PRT2
5	ATOM	6087	CG	MET	534	69.178	12.159	22.968	0.50	31.30	PRT2
	ATOM	6088	SD	MET	534	68.892	13.138	24.442	0.50	33.06	PRT2
	ATOM	6089	CE	MET	534	70.060	12.456	25.568	0.50	34.22	PRT2
	ATOM	6090	SG	CYS	603	56.041	-7.885	16.319	0.50	37.82	PRT2
	ATOM	2682	OH2	TIP3	1	71.788	25.340	2.479	1.00	24.18	
	ATOM	2685	OH2	TIP3	2	40.022	4.089	16.127	1.00	43.09	
	ATOM	2688	OH2	TIP3	3	83.745	19.577	10.510	1.00	27.38	
	ATOM	2691	OH2	TIP3	4	83.420	20.163	7.482	1.00	30.85	
	ATOM	2694	OH2	TIP3	5	75.022	16.439	6.505	1.00	33.15	
10	ATOM	2697	OH2	TIP3	6	86.308	19.567	9.284	1.00	33.55	
	ATOM	2700	OH2	TIP3	7	51.888	11.346	24.141	1.00	34.30	
	ATOM	2703	OH2	TIP3	8	55.125	9.616	22.499	1.00	21.44	
	ATOM	2706	OH2	TIP3	9	57.087	4.825	32.412	1.00	28.79	
	ATOM	2709	OH2	TIP3	10	52.142	4.824	13.180	1.00	21.14	
	ATOM	2712	OH2	TIP3	11	41.312	5.600	22.910	1.00	49.23	
	ATOM	2715	OH2	TIP3	12	45.083	9.130	21.671	1.00	37.09	
	ATOM	2718	OH2	TIP3	13	64.608	-2.335	28.803	1.00	44.31	
	ATOM	2721	OH2	TIP3	14	77.192	13.199	23.753	1.00	32.96	
15	ATOM	2724	OH2	TIP3	15	79.201	17.296	17.997	1.00	38.51	
	ATOM	2727	OH2	TIP3	16	82.988	11.608	15.745	1.00	27.56	
	ATOM	2730	OH2	TIP3	17	14.096	-9.819	0.333	1.00	23.53	
	ATOM	2733	OH2	TIP3	18	38.325	0.249	5.313	1.00	43.17	
	ATOM	2736	OH2	TIP3	19	26.939	6.001	5.100	1.00	30.00	
	ATOM	2739	OH2	TIP3	20	34.305	-1.615	16.992	1.00	44.82	
	ATOM	2742	OH2	TIP3	21	20.300	2.328	27.798	1.00	45.23	
	ATOM	2745	OH2	TIP3	22	50.996	-11.607	38.052	1.00	43.49	
	ATOM	2748	OH2	TIP3	23	17.261	-6.167	-1.444	1.00	27.13	
20	ATOM	2751	OH2	TIP3	24	27.724	8.124	14.996	1.00	31.20	
	ATOM	2754	OH2	TIP3	25	31.558	0.294	6.872	1.00	34.54	
	ATOM	2757	OH2	TIP3	26	26.907	-12.815	28.161	1.00	49.20	
	ATOM	2760	OH2	TIP3	27	28.705	-17.192	13.269	1.00	30.16	
	ATOM	2763	OH2	TIP3	28	88.639	13.953	7.692	1.00	41.04	
	ATOM	2766	OH2	TIP3	29	-2.328	-3.576	11.086	1.00	44.89	
	ATOM	2769	OH2	TIP3	30	34.919	-4.069	19.070	1.00	53.72	
	ATOM	2772	OH2	TIP3	31	80.124	17.865	9.324	1.00	28.96	
	ATOM	2775	OH2	TIP3	32	5.417	3.492	10.771	1.00	34.07	
25	ATOM	2778	OH2	TIP3	33	-10.718	4.889	11.542	1.00	30.81	
	ATOM	2781	OH2	TIP3	34	29.486	-8.823	20.599	1.00	51.35	
	ATOM	2784	OH2	TIP3	35	6.151	3.065	13.821	1.00	34.56	
	ATOM	2787	OH2	TIP3	36	31.907	2.919	0.361	1.00	48.13	
	ATOM	2790	OH2	TIP3	37	19.974	1.928	-3.873	1.00	30.12	
	ATOM	2793	OH2	TIP3	38	61.976	2.660	32.604	1.00	36.01	
	ATOM	2796	OH2	TIP3	39	21.084	-7.119	-3.759	1.00	20.12	
	ATOM	2799	OH2	TIP3	40	-15.729	8.693	22.468	1.00	54.88	
	ATOM	2802	OH2	TIP3	41	40.160	2.461	8.734	1.00	37.95	
30	ATOM	2805	OH2	TIP3	42	19.248	11.349	0.190	1.00	37.63	
	ATOM	2808	OH2	TIP3	43	66.856	9.143	17.185	1.00	27.91	
	ATOM	2811	OH2	TIP3	44	87.262	19.150	18.734	1.00	57.83	
	ATOM	2814	OH2	TIP3	45	74.597	17.144	3.987	1.00	42.19	
	ATOM	2817	OH2	TIP3	46	29.192	16.988	10.582	1.00	37.28	
	ATOM	2820	OH2	TIP3	47	66.415	7.073	14.829	1.00	34.86	
	ATOM	2823	OH2	TIP3	48	85.063	21.453	5.510	1.00	27.42	
	ATOM	2826	OH2	TIP3	49	-4.716	2.835	2.998	1.00	40.54	
	ATOM	2829	OH2	TIP3	50	19.369	5.069	4.888	1.00	38.40	
35	ATOM	2832	OH2	TIP3	51	34.750	5.517	24.999	1.00	29.11	
	ATOM	2835	OH2	TIP3	52	34.740	-16.765	14.093	1.00	32.68	

	ATOM	2838	OH2	TIP3	53	59.994	7.555	27.844	1.00	32.60
	ATOM	2841	OH2	TIP3	54	-7.401	-1.595	6.080	1.00	43.73
	ATOM	2844	OH2	TIP3	55	55.257	12.084	25.108	1.00	44.32
	ATOM	2847	OH2	TIP3	56	68.239	6.953	16.647	1.00	44.46
	ATOM	2850	OH2	TIP3	57	73.621	20.852	18.820	1.00	29.47
5	ATOM	2853	OH2	TIP3	58	3.399	-8.294	-8.210	1.00	22.31
	ATOM	2856	OH2	TIP3	59	37.999	10.824	5.505	1.00	31.62
	ATOM	2859	OH2	TIP3	60	29.779	-9.515	-1.395	1.00	40.76
	ATOM	2862	OH2	TIP3	61	49.114	1.432	12.261	1.00	29.92
	ATOM	2865	OH2	TIP3	62	41.257	4.012	29.005	1.00	39.24
	ATOM	2868	OH2	TIP3	63	11.113	-12.848	1.296	1.00	34.36
	ATOM	2871	OH2	TIP3	64	-1.221	-4.593	21.504	1.00	34.24
	ATOM	2874	OH2	TIP3	65	30.002	16.453	13.258	1.00	49.66
	ATOM	2877	OH2	TIP3	66	8.212	4.106	3.434	1.00	36.54
10	ATOM	2880	OH2	TIP3	67	72.868	18.807	22.589	1.00	38.26
	ATOM	2883	OH2	TIP3	68	-8.056	-3.666	25.021	1.00	39.81
	ATOM	2886	OH2	TIP3	69	66.436	-4.683	28.008	1.00	60.97
	ATOM	2889	OH2	TIP3	70	22.063	-20.641	4.804	1.00	42.25
	ATOM	2892	OH2	TIP3	71	59.860	-7.407	4.859	1.00	56.78
	ATOM	2895	OH2	TIP3	72	16.887	-13.832	-2.611	1.00	59.32
	ATOM	2898	OH2	TIP3	73	-15.108	7.351	4.303	1.00	31.87
	ATOM	2901	OH2	TIP3	74	32.901	2.922	13.663	1.00	37.89
	ATOM	2904	OH2	TIP3	75	0.173	-2.666	11.035	1.00	39.12
15	ATOM	2907	OH2	TIP3	76	17.533	2.317	5.808	1.00	18.66
	ATOM	2910	OH2	TIP3	77	27.183	3.730	6.349	1.00	29.04
	ATOM	2913	OH2	TIP3	78	-8.812	5.887	9.703	1.00	30.53
	ATOM	2916	OH2	TIP3	79	1.614	-2.195	8.694	1.00	30.79
	ATOM	2919	OH2	TIP3	80	-5.304	-3.157	6.846	1.00	47.38
	ATOM	2922	OH2	TIP3	81	17.401	2.918	1.973	1.00	20.47
	ATOM	2925	OH2	TIP3	82	20.333	3.188	3.159	1.00	24.44
	ATOM	2928	OH2	TIP3	83	0.408	-2.516	22.276	1.00	31.11
	ATOM	2931	OH2	TIP3	84	20.095	-6.123	-1.372	1.00	17.62
20	ATOM	2934	OH2	TIP3	85	11.018	-15.627	7.421	1.00	60.29
	ATOM	2937	OH2	TIP3	86	4.089	-12.037	11.797	1.00	39.47
	ATOM	2940	OH2	TIP3	87	6.459	0.908	-3.278	1.00	30.31
	ATOM	2943	OH2	TIP3	88	-13.493	1.004	5.319	1.00	41.13
	ATOM	2946	OH2	TIP3	89	15.418	-7.532	0.022	1.00	21.29
	ATOM	2949	OH2	TIP3	90	-2.128	-5.834	4.052	1.00	57.55
	ATOM	2952	OH2	TIP3	91	12.731	4.833	-4.212	1.00	44.52
	ATOM	2955	OH2	TIP3	92	69.320	27.812	2.191	1.00	37.47
	ATOM	2958	OH2	TIP3	93	24.851	-12.871	0.285	1.00	44.73
25	ATOM	2961	OH2	TIP3	94	60.301	-4.459	33.927	1.00	40.13
	ATOM	2964	OH2	TIP3	95	10.488	5.951	3.205	1.00	41.53
	ATOM	2967	OH2	TIP3	96	-9.708	-4.233	4.439	1.00	29.77
	ATOM	2970	OH2	TIP3	97	72.950	-1.768	10.144	1.00	39.69
	ATOM	2973	OH2	TIP3	98	-3.287	5.612	30.618	1.00	34.65
	ATOM	2976	OH2	TIP3	99	36.658	1.007	11.717	1.00	35.43
	ATOM	2979	OH2	TIP3	100	21.221	6.459	16.863	1.00	20.70
	ATOM	2982	OH2	TIP3	101	5.833	-8.726	22.274	1.00	47.13
	ATOM	2985	OH2	TIP3	102	-13.529	7.868	17.445	1.00	31.95
30	ATOM	2988	OH2	TIP3	103	26.795	-10.682	-0.807	1.00	28.65
	ATOM	2991	OH2	TIP3	104	23.711	1.909	18.309	1.00	28.29
	ATOM	2994	OH2	TIP3	105	-2.187	12.232	3.920	1.00	44.98
	ATOM	2997	OH2	TIP3	106	59.483	12.398	33.535	1.00	39.58
	ATOM	3000	OH2	TIP3	107	4.439	-10.915	1.996	1.00	43.77
	ATOM	3003	OH2	TIP3	108	8.041	2.687	0.648	1.00	45.32
	ATOM	3006	OH2	TIP3	109	75.836	1.477	25.476	1.00	41.65
	ATOM	3009	OH2	TIP3	110	48.604	15.594	14.349	1.00	36.36
	ATOM	3012	OH2	TIP3	111	2.396	-11.387	9.259	1.00	34.21
35	ATOM	3015	OH2	TIP3	112	82.927	26.453	12.807	1.00	36.54
	ATOM	3018	OH2	TIP3	113	8.983	-6.631	-3.299	1.00	47.01

	ATOM	3021	OH2	TIP3	114	-8.690	4.367	4.504	1.00	41.25
	ATOM	3024	OH2	TIP3	115	7.941	-13.921	8.777	1.00	36.12
	ATOM	3027	OH2	TIP3	116	51.295	6.440	10.632	1.00	28.37
	ATOM	3030	OH2	TIP3	117	20.432	3.771	15.637	1.00	31.22
	ATOM	3033	OH2	TIP3	118	72.882	3.887	20.227	1.00	30.22
5	ATOM	3036	OH2	TIP3	119	5.187	-11.863	22.711	1.00	47.49
	ATOM	3039	OH2	TIP3	120	33.889	2.571	16.293	1.00	40.04
	ATOM	3042	OH2	TIP3	121	9.504	-12.183	7.160	1.00	31.48
	ATOM	3045	OH2	TIP3	122	8.397	3.827	-1.647	1.00	46.92
	ATOM	3048	OH2	TIP3	123	7.281	7.321	2.391	1.00	62.46
	ATOM	3051	OH2	TIP3	124	35.682	-1.725	0.534	1.00	36.75
	ATOM	3054	OH2	TIP3	125	44.465	10.095	11.089	1.00	44.72
	ATOM	3057	OH2	TIP3	126	45.247	11.893	21.405	1.00	33.51
	ATOM	3060	OH2	TIP3	127	57.386	-10.506	14.020	1.00	45.72
10	ATOM	3063	OH2	TIP3	128	-3.033	15.103	16.644	1.00	38.48
	ATOM	3066	OH2	TIP3	129	85.621	11.111	8.814	1.00	38.13
	ATOM	3069	OH2	TIP3	130	13.040	-2.760	2.176	1.00	31.26
	ATOM	3072	OH2	TIP3	131	75.607	3.932	20.836	1.00	55.09
	ATOM	3075	OH2	TIP3	132	13.080	7.467	-2.358	1.00	35.05
	ATOM	3078	OH2	TIP3	133	11.308	-9.967	0.995	1.00	28.96
	ATOM	3081	OH2	TIP3	134	13.716	-16.170	3.848	1.00	44.64
	ATOM	3084	OH2	TIP3	135	-6.498	-3.706	16.178	1.00	43.17
	ATOM	3087	OH2	TIP3	136	25.841	-12.949	3.950	1.00	41.14
15	ATOM	3090	OH2	TIP3	137	-16.285	10.803	6.585	1.00	45.75
	ATOM	3093	OH2	TIP3	138	86.457	12.585	6.477	1.00	36.37
	ATOM	3096	OH2	TIP3	139	32.097	-4.644	2.224	1.00	28.35
	ATOM	3099	OH2	TIP3	140	44.936	7.528	11.961	1.00	46.60
	ATOM	3102	OH2	TIP3	141	80.781	12.162	16.353	1.00	41.46
	ATOM	3105	OH2	TIP3	142	2.547	-7.532	-1.453	1.00	41.42
	ATOM	3108	OH2	TIP3	143	31.850	-5.907	21.194	1.00	54.70
	ATOM	3111	OH2	TIP3	144	74.524	-2.663	12.264	1.00	40.35
	ATOM	3114	OH2	TIP3	145	7.592	6.769	-0.931	1.00	58.34
20	ATOM	3117	OH2	TIP3	146	71.168	5.735	21.648	1.00	27.86
	ATOM	3120	OH2	TIP3	147	67.876	-4.900	8.725	1.00	33.58
	ATOM	3123	OH2	TIP3	148	0.554	-10.181	6.605	1.00	75.65
	ATOM	3126	OH2	TIP3	149	67.965	18.266	10.874	1.00	30.42
	ATOM	3129	OH2	TIP3	150	3.509	8.125	4.021	1.00	40.77
	ATOM	3132	OH2	TIP3	151	52.216	12.175	18.131	1.00	47.63
	ATOM	3135	OH2	TIP3	152	-10.336	6.394	5.014	1.00	48.53
	ATOM	3138	OH2	TIP3	153	76.427	1.384	-1.196	1.00	47.21
	ATOM	3141	OH2	TIP3	154	10.116	-12.199	17.089	1.00	70.16
25	ATOM	3144	OH2	TIP3	155	34.043	14.595	18.314	1.00	40.56
	ATOM	3147	OH2	TIP3	156	2.488	-8.304	16.835	1.00	64.47
	ATOM	3150	OH2	TIP3	157	29.610	1.954	6.685	1.00	48.74
	ATOM	3153	OH2	TIP3	158	32.578	-17.270	12.109	1.00	37.35
	ATOM	3156	OH2	TIP3	159	42.013	18.106	11.196	1.00	68.33
	ATOM	3159	OH2	TIP3	160	87.646	10.346	5.465	1.00	75.39
	ATOM	3162	OH2	TIP3	161	69.931	-3.739	24.921	1.00	70.42
	ATOM	3165	OH2	TIP3	162	77.277	5.700	23.531	1.00	53.26
	ATOM	3168	OH2	TIP3	163	34.172	15.704	1.865	1.00	44.88
30	ATOM	3171	OH2	TIP3	164	-9.871	7.514	7.751	1.00	39.18
	ATOM	3174	OH2	TIP3	165	11.814	5.604	7.443	1.00	46.70
	ATOM	3177	OH2	TIP3	166	-8.801	13.912	13.532	1.00	52.89
	ATOM	3180	OH2	TIP3	167	32.195	3.409	18.336	1.00	32.33
	ATOM	3183	OH2	TIP3	168	-8.858	9.696	24.279	1.00	38.90
	ATOM	3186	OH2	TIP3	169	-1.135	-6.924	15.691	1.00	43.05
	ATOM	3189	OH2	TIP3	170	79.806	0.323	15.371	1.00	36.91
	ATOM	3192	OH2	TIP3	171	67.181	20.622	-1.545	1.00	44.72
	ATOM	3195	OH2	TIP3	172	-0.823	3.732	1.065	1.00	52.11
35	ATOM	3198	OH2	TIP3	173	-0.130	6.021	2.491	1.00	40.87
	ATOM	3201	OH2	TIP3	174	-1.027	8.941	1.064	1.00	60.72

	ATOM	3204	OH2	TIP3	175	-5.566	8.867	2.163	1.00	47.25
	ATOM	3207	OH2	TIP3	176	-7.259	10.294	4.033	1.00	53.61
	ATOM	3210	OH2	TIP3	177	2.664	7.247	1.058	1.00	46.41
	ATOM	3213	OH2	TIP3	178	5.295	10.728	8.257	1.00	39.84
	ATOM	3216	OH2	TIP3	179	63.743	12.726	22.713	1.00	49.55
5	ATOM	3219	OH2	TIP3	180	79.165	1.016	17.948	1.00	51.41
	ATOM	3222	OH2	TIP3	181	13.823	-1.538	-3.942	1.00	39.85
	ATOM	3225	OH2	TIP3	182	59.255	3.213	32.873	1.00	76.77
	ATOM	3228	OH2	TIP3	183	32.210	13.612	20.027	1.00	60.41
	ATOM	3231	OH2	TIP3	184	72.606	16.267	22.574	1.00	60.78
	ATOM	3234	OH2	TIP3	185	-0.147	5.713	30.877	1.00	50.19
	ATOM	3237	OH2	TIP3	186	-1.207	-4.507	27.969	1.00	65.19
	ATOM	3240	OH2	TIP3	187	81.340	15.584	16.808	1.00	64.48
	ATOM	3243	OH2	TIP3	188	-17.535	3.884	23.785	1.00	57.17
10	ATOM	3246	OH2	TIP3	189	27.503	10.697	14.669	1.00	36.11
	ATOM	3249	OH2	TIP3	190	34.585	4.535	27.618	1.00	61.68
	ATOM	3252	OH2	TIP3	191	-3.701	-4.982	9.069	1.00	43.66
	ATOM	3255	OH2	TIP3	192	42.524	7.811	22.390	1.00	34.53
	ATOM	3258	OH2	TIP3	193	52.937	11.764	21.790	1.00	36.19
	ATOM	3261	OH2	TIP3	194	-7.665	8.600	6.358	1.00	59.08
	ATOM	3264	OH2	TIP3	195	86.880	5.187	16.579	1.00	55.88
	ATOM	3267	OH2	TIP3	196	55.377	16.147	20.540	1.00	48.25
	ATOM	3270	OH2	TIP3	197	51.394	19.664	22.988	1.00	46.81
15	ATOM	3273	OH2	TIP3	198	20.021	7.087	7.226	1.00	52.98
	ATOM	3276	OH2	TIP3	199	28.959	1.819	-3.219	1.00	40.50
	ATOM	3279	OH2	TIP3	200	26.533	2.812	-4.295	1.00	54.24
	ATOM	3282	OH2	TIP3	201	36.739	3.003	18.397	1.00	42.13
	ATOM	3285	OH2	TIP3	202	16.968	-20.752	14.318	1.00	54.54
	ATOM	3288	OH2	TIP3	203	28.177	-14.418	6.134	1.00	61.36
	ATOM	3291	OH2	TIP3	204	31.488	1.501	-1.796	1.00	47.49
	ATOM	3294	OH2	TIP3	205	10.665	-16.494	15.731	1.00	41.42
	ATOM	3297	OH2	TIP3	206	6.916	-12.200	6.160	1.00	61.94
20	ATOM	3300	OH2	TIP3	207	-12.659	14.357	10.908	1.00	52.96
	ATOM	3303	OH2	TIP3	208	11.274	9.662	-1.588	1.00	48.45
	ATOM	3306	OH2	TIP3	209	11.491	12.484	-1.531	1.00	44.51
	ATOM	3309	OH2	TIP3	210	34.037	13.520	-1.011	1.00	48.43
	ATOM	3312	OH2	TIP3	211	31.162	18.259	7.980	1.00	44.86
	ATOM	3315	OH2	TIP3	212	36.937	11.633	-1.971	1.00	49.85
	ATOM	3318	OH2	TIP3	213	64.024	13.599	26.505	1.00	37.53
	ATOM	3321	OH2	TIP3	214	36.528	5.933	14.857	1.00	57.04
	ATOM	3324	OH2	TIP3	215	90.599	4.042	6.342	1.00	54.08
25	ATOM	3327	OH2	TIP3	216	50.139	-11.645	10.526	1.00	54.64
	ATOM	3330	OH2	TIP3	217	66.523	-1.024	30.536	1.00	39.41
	ATOM	3333	OH2	TIP3	218	74.880	18.976	20.591	1.00	41.84
	ATOM	3336	OH2	TIP3	219	-3.095	9.744	3.142	1.00	52.35
	ATOM	3339	OH2	TIP3	220	5.601	-3.682	25.022	1.00	29.30
	ATOM	3342	OH2	TIP3	221	35.616	6.407	12.455	1.00	44.48
	ATOM	3345	OH2	TIP3	222	-5.381	16.006	14.081	1.00	44.23
	ATOM	3348	OH2	TIP3	223	46.509	-11.503	26.814	1.00	53.82
	ATOM	3351	OH2	TIP3	224	-3.791	-5.481	20.929	1.00	61.42
30	ATOM	3354	OH2	TIP3	225	1.622	-3.876	-0.402	1.00	58.60
	ATOM	3357	OH2	TIP3	226	86.244	11.220	23.133	1.00	59.84
	ATOM	3360	OH2	TIP3	227	11.011	7.959	5.659	1.00	63.07
	ATOM	3363	OH2	TIP3	228	64.610	-8.031	20.406	1.00	48.11
	ATOM	3366	OH2	TIP3	229	11.446	-17.829	13.438	1.00	51.35
	ATOM	3369	OH2	TIP3	230	72.056	1.258	-1.830	1.00	43.88
	ATOM	3372	OH2	TIP3	231	57.359	9.732	11.744	1.00	65.45
	ATOM	3375	OH2	TIP3	232	43.344	20.728	30.066	1.00	61.52
	ATOM	3378	OH2	TIP3	233	66.723	16.772	15.661	1.00	43.79
35	ATOM	3381	OH2	TIP3	234	88.036	22.036	4.257	1.00	61.83
	ATOM	3384	OH2	TIP3	235	12.085	2.346	27.862	1.00	46.29

	ATOM	3387	OH2	TIP3	236	64.898	-0.425	3.209	1.00	50.06
	ATOM	3390	OH2	TIP3	237	72.114	28.348	7.731	1.00	53.01
	ATOM	3393	OH2	TIP3	238	25.792	-8.081	27.181	1.00	55.19
	ATOM	3396	OH2	TIP3	239	-18.262	10.614	12.607	1.00	51.54
	ATOM	3399	OH2	TIP3	240	30.336	11.280	16.201	1.00	46.53
5	ATOM	3402	OH2	TIP3	241	22.712	-15.818	-2.226	1.00	47.29
	ATOM	3405	OH2	TIP3	242	29.700	9.496	18.074	1.00	40.10
	ATOM	3408	OH2	TIP3	243	63.297	-0.480	5.497	1.00	49.90
	ATOM	3411	OH2	TIP3	244	61.458	7.093	11.497	1.00	45.71
	ATOM	3414	OH2	TIP3	245	-0.217	2.232	32.172	1.00	46.12
	ATOM	3417	OH2	TIP3	246	66.196	6.250	12.159	1.00	34.47

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The following abbreviations are used in Tables 3 and 4:
"Atom Type" refers to the element whose coordinates are provided. The first letter in the column defines the element.

5 "A.A." refers to amino acid.

"X, Y and Z" provide the Cartesian coordinates of the element.

"B" is a thermal factor that measures movement of the atom around its atomic center.

10 "OCC" refers to occupancy, and represents the percentage of time the atom type occupies the particular coordinate. OCC values range from 0 to 1, with 1 being 100%.

"PRT1" or "PRT2" relate to occupancy, with PRT1 designating the coordinates of the atom when in the first
15 conformation and PRT2 designating the coordinates of the atom when in the second or alternate conformation.

Structures coordinates for FLGK according to Tables 3 and 4 may be modified by mathematical manipulation. Such manipulations include, but are not limited to,
20 crystallographic permutations of the raw structure coordinates, fractionalization of the raw structure coordinates, integer additions or subtractions to sets of the raw structure coordinates, inversion of the raw structure coordinates and any combination of the above.

25 The present invention is not to be limited in scope by the exemplified embodiments, which are intended as illustrations of single aspects of the invention. Indeed, various modifications of the invention in addition to those described herein will become apparent to those having skill
30 in the art from the foregoing description and accompanying drawings. Such modifications are intended to fall within the scope of the appended claims.

Sequence Listing

(1) GENERAL INFORMATION:

- 5 (i) APPLICANT: Mohammadi, Moosa
Schlessinger, Joseph
Hubbard, Stevan R.
- (ii) TITLE OF INVENTION: CRYSTALS OF THE TYROSINE KINASE DOMAIN OF
RECEPTOR TYROSINE KINASES THAT UNDERGO LIGAND-INDUCED DIMERIZATION ALONE
AND IN COMBINATION WITH A NON-HYDROLYZABLE ADENOSINE TRIPHOSPHATE
ANALOGUE
- (iii) NUMBER OF SEQUENCES: 5
- 10 (iv) CORRESPONDENCE ADDRESS:
(A) ADDRESSEE: Pennie & Edmonds
(B) STREET: 1155 Avenue of the Americas
(C) CITY: New York
(D) STATE: New York
(E) COUNTRY: USA
(F) ZIP: 10036
- 15 (v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
(A) APPLICATION NUMBER: US To be assigned
(B) FILING DATE: Concurrently herewith
(C) CLASSIFICATION:
- 20 (viii) ATTORNEY/AGENT INFORMATION:
(A) NAME: Coruzzi, Laura A.
(B) REGISTRATION NUMBER: 30,742
(C) REFERENCE/DOCKET NUMBER: 7683-116
- (ix) TELECOMMUNICATION INFORMATION:
(A) TELEPHONE: 212-790-9090
(B) TELEFAX: 212-869-8864
25 (C) TELEX: 66141 PENNIE

(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 310 amino acids
(B) TYPE: amino acid
30 (C) STRANDEDNESS: single
(D) TOPOLOGY:
- (ii) MOLECULE TYPE: protein
- (iii) HYPOTHETICAL: NO
- 35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
Met Leu Ala Gly Val Ser Glu Tyr Glu Leu Pro Glu Asp Pro Arg Trp
1 5 10 15

(iii) HYPOTHETICAL: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

5 Ser Ala Ala Gly Thr Met Val Ala Gly Val Ser Glu Tyr Glu Leu Pro
1 5 10 15
Glu Asp Pro Arg Trp Glu Leu Pro Arg Asp Arg Leu Val Leu Gly Lys
20 25 30
Pro Leu Gly Glu Gly Ala Phe Gly Gln Val Val Leu Ala Glu Ala Ile
35 40 45
10 Gly Leu Asp Lys Asp Lys Pro Asn Arg Val Thr Lys Val Ala Val Lys
50 55 60
Met Leu Lys Ser Asp Ala Thr Glu Lys Asp Leu Ser Asp Leu Ile Ser
65 70 75 80
Glu Met Glu Met Met Lys Met Ile Gly Lys His Lys Asn Ile Ile Asn
85 90 95
15 Leu Leu Gly Ala Cys Thr Gln Asp Gly Pro Leu Tyr Val Ile Val Glu
100 105 110
Tyr Ala Ser Lys Gly Asn Leu Arg Glu Tyr Leu Gln Ala Arg Arg Pro
115 120 125
Pro Gly Leu Glu Tyr Ser Tyr Asn Pro Ser His Asn Pro Glu Glu Gln
130 135 140
20 Leu Ser Ser Lys Asp Leu Val Ser Cys Ala Tyr Gln Val Ala Arg Gly
145 150 155 160
Met Glu Tyr Leu Ala Ser Lys Lys Cys Ile His Arg Asp Leu Ala Ala
165 170 175
Arg Asn Val Leu Val Thr Glu Asp Asn Val Met Lys Ile Ala Asp Phe
180 185 190
25 Gly Leu Ala Arg Asp Ile His His Ile Asp Tyr Tyr Lys Lys Thr Thr
195 200 205
Asn Gly Arg Leu Pro Val Lys Trp Met Ala Pro Glu Ala Leu Phe Asp
210 215 220
Arg Ile Tyr Thr His Gln Ser Asp Val Trp Ser Phe Gly Val Leu Leu
225 230 235 240
30 Trp Glu Ile Phe Thr Leu Gly Gly Ser Pro Tyr Pro Gly Val Pro Val
245 250 255
Glu Glu Leu Phe Lys Leu Leu Lys Glu Gly His Arg Met Asp Lys Pro
260 265 270
Ser Asn Cys Thr Asn Glu Leu Tyr Met Met Met Arg Asp Cys Trp His
275 280 285
35 Ala Val Pro Ser Gln Arg Pro Thr Phe Lys Gln Leu Val Glu Asp Leu
290 295 300
Asp Arg Ile Val Ala Leu Thr Ser Asn Gln Glu
305 310 315

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 351 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY:

5

(ii) MOLECULE TYPE: protein

(iii) HYPOTHETICAL: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

10

Met Arg Gly Ser His His His His His Gly Met Ala Ser Met Thr
1 5 10 15

Gly Gly Gln Gln Met Gly Arg Asp Leu Tyr Asp Asp Asp Asp Lys Asp
 20 25 30

Pro Ser Ser Arg Ser Ala Ala Gly Thr Met Val Ala Gly Val Ser Glu
 35 40 45

15

Tyr Glu Leu Pro Glu Asp Pro Arg Trp Glu Leu Pro Arg Asp Arg Leu
 50 55 60

Val Leu Gly Lys Pro Leu Gly Glu Gly Ala Phe Gly Gln Val Val Leu
65 70 75 80

Ala Glu Ala Ile Gly Leu Asp Lys Asp Lys Pro Asn Arg Val Thr Lys
 85 90 95

20

Val Ala Val Lys Met Leu Lys Ser Asp Ala Thr Glu Lys Asp Leu Ser
 100 105 110

Asp Leu Ile Ser Glu Met Glu Met Met Lys Met Ile Gly Lys His Lys
 115 120 125

Asn Ile Ile Asn Leu Leu Gly Ala Cys Thr Gln Asp Gly Pro Leu Tyr
 130 135 140

25

Val Ile Val Glu Tyr Ala Ser Lys Gly Asn Leu Arg Glu Tyr Leu Gln
145 150 155 160

Ala Arg Arg Pro Pro Gly Leu Glu Tyr Ser Tyr Asn Pro Ser His Asn
 165 170 175

Pro Glu Glu Gln Leu Ser Ser Lys Asp Leu Val Ser Cys Ala Tyr Gln
 180 185 190

30

Val Ala Arg Gly Met Glu Tyr Leu Ala Ser Lys Lys Cys Ile His Arg
 195 200 205

Asp Leu Ala Ala Arg Asn Val Leu Val Thr Glu Asp Asn Val Met Lys
210 215 220

Ile Ala Asp Phe Gly Leu Ala Arg Asp Ile His His Ile Asp Tyr Tyr
225 230 235 240

35

Lys Lys Thr Thr Asn Gly Arg Leu Pro Val Lys Trp Met Ala Pro Glu
 245 250 255

Ala Leu Phe Asp Arg Ile Tyr Thr His Gln Ser Asp Val Trp Ser Phe

		260		265		270	
		Gly Val Leu Leu Trp Glu Ile Phe Thr Leu Gly Gly Ser Pro Tyr Pro					
		275		280		285	
		Gly Val Pro Val Glu Glu Leu Phe Lys Leu Leu Lys Glu Gly His Arg					
		290		295		300	
5		Met Asp Lys Pro Ser Asn Cys Thr Asn Glu Leu Tyr Met Met Met Arg					
		305		310		315	320
		Asp Cys Trp His Ala Val Pro Ser Gln Arg Pro Thr Phe Lys Gln Leu					
			325		330		335
		Val Glu Asp Leu Asp Arg Ile Val Ala Leu Thr Ser Asn Gln Glu					
			340		345		350

10 (2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 933 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (ii) MOLECULE TYPE: cDNA to mRNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

	ATGCTAGCAG GGGTCTCTGA GTATGAGCTT CCCGAAGACC CTCGCTGGGA GCTGCCTCGG	60
20	GACAGACTGG TCTTAGGCAA ACCCTGGGA GAGGGCTGCT TTGGGCAGGT GGTGTGGCA	120
	GAGGCTATCG GGCTGGACAA GGACAAACCC AACCGTGTGA CCAAAGTGGC TGTGAAGATG	180
	TTGAAGTCGG ACGCAACAGA GAAAGACTTG TCAGACCTGA TCTCAGAAAT GGAGATGATG	240
	AAGATGATCG GGAAGCATAA GAATATCATC AACCTGCTGG GGGCCTGCAC GCAGGATGGT	300
	CCCTTGATATG TCATCGTGGA GTATGCCTCC AAGGGCAACC TGCGGGAGTA CCTGCAGGCC	360
25	CGGAGGCCCC CAGGGCTGGA ATACTGCTAC AACCCAGCC ACAACCCAGA GGAGCAGCTC	420
	TCCTCCAAGG ACCTGGTGTC CTGCGCTAC CAGGTGGCCC GAGGCATGGA GTATCTGGCC	480
	TCCAAGAAGT GCATACACCG AGACCTGGCA GCCAGGAATG TCCTGGTGAC AGAGGACAAT	540
	GTGATGAAGA TAGCAGACTT TGGCCTCGCA CGGGACATTC ACCACATCGA CTACTATAAA	600
30	AAGACAACCA ACGGCCGACT GCCTGTGAAG TGGATGGCAC CCGAGGCATT ATTTGACCGG	660
	ATCTACACCC ACCAGAGTGA TGTGTGGTCT TTCGGGGTGC TCCTGTGGGA GATCTTCACT	720
	CTGGGCGGCT CCCCATACCC CGGTGTGCCT GTGGAGGAAC TTTTCAAGCT GCTGAAGGAG	780
	GGTCACCGCA TGGACAAGCC CAGTAACTGC ACCAACGAGC TGTACATGAT GATGCGGGAC	840
	TGCTGGCATG CAGTGCCCTC ACAGAGACCC ACCTTCAAGC AGCTGGTGGA AGACCTGGAC	900
35	CGCATCGTGG CCTTGACCTC CAACCAGGAG TAG	933

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1056 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

	ATGCGGGGTT CTCATCATCA TCATCATCAT GGTATGGCTA GCATGACTGG TGGACAGCAA	60
	ATGGGTCGGG ATCTGTACGA CGATGACGAT AAGGATCCGA GCTCGAGATC TGCAGCTGGT	120
10	ACCATGGTAG CAGGGGTCTC TGAGTATGAG CTTCCCGAAG ACCCTCGCTG GGAGCTGCCT	180
	CGGGACAGAC TGGTCTTAGG CAAACCCCTG GGAGAGGGCG CCTTTGGGCA GGTGGTGTG	240
	GCAGAGGCTA TCGGGCTGGA CAAGGACAAA CCAACCGTG TGACCAAAGT GGCTGTGAAG	300
	ATGTTGAAGT CGGACGCAAC AGAGAAAGAC TTGTCAGACC TGATCTCAGA AATGGAGATG	360
15	ATGAAGATGA TCGGGAAGCA TAAGAATATC ATCAACCTGC TGGGGGCCTG CACGCAGGAT	420
	GGTCCCTTGT ATGTCATCGT GGAGTATGCC TCCAAGGGCA ACCTGCGGGA GTACCTGCAG	480
	GCCCGGAGGC CCCAGGGCT GGAATACTCC TACAACCCCA GCCACAACCC AGAGGAGCAG	540
	CTCTCCTCCA AGGACCTGGT GTCCTGCGCC TACCAGGTGG CCCGAGGCAT GGAGTATCTG	600
	GCCTCCAAGA AGTGCATACA CCGAGACCTG GCAGCCAGGA ATGTCCTGGT GACAGAGGAC	660
20	AATGTGATGA AGATAGCAGA CTTTGGCCTC GCACGGGACA TTCACCACAT CGACTACTAT	720
	AAAAAGACAA CCAACGGCCG ACTGCCTGTG AAGTGGATGG CACCCGAGGC ATTATTTGAC	780
	CGGATCTACA CCCACCAGAG TGATGTGTGG TCTTTCGGGG TGCTCCTGTG GGAGATCTTC	840
	ACTCTGGGCG GCTCCCCATA CCCCGGTGTG CCTGTGGAGG AACTTTTCAA GCTGCTGAAG	900
25	GAGGGTCACC GCATGGACAA GCCCAGTAAC TGCACCAACG AGCTGTACAT GATGATGCGG	960
	GACTGCTGGC ATGCAGTGCC CTCACAGAGA CCCACCTTCA AGCAGCTGGT GGAAGACCTG	1020
	GACCGCATCG TGGCCTTGAC CTCCAACCAG GAGTAG	1056

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